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### Abstract

In 2019 the Mid-Atlantic Athletic Conference signed an agreement with ESPN to stream men's and women's basketball games on its affiliated streaming service. In response, the Manhattan College Communication Department developed a Sports Media Production program to teach undergraduate students the basics of live sports production. The goal was for undergraduate students to participate in the production of forty games per year, including shooting, editing, generating replays, inserting graphics, and mixing five tracks of audio. Over the past three years approximately eighty students have taken part in these live productions, with audiences ranging from several hundred to ten thousand. This paper will explore the successes and challenges of developing a program of instruction out of a public/private partnership. Through the implementation of Vygotsky's Scaffolding theory, students are immersed in both learning and teaching production from the moment each new season begins, while simultaneously exploring significant issues in Sport and Media Studies as part of the curriculum.

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### Introduction

In 2016, the Mid-Atlantic Athletic Conference (hereafter MAAC) signed an agreement with ESPN to stream men's and women's basketball games on Disney's subscription streaming channels ESPN+ and ESPN3 (Mulholland, 2022). The MAAC is a Division 1 conference made up of eleven mid-sized private colleges and Universities in the Northeast, including Iona, Fairfield, Quinnipiac, and Marist. One member of the MAAC, Manhattan College, responded to the new agreement by developing an undergraduate Sports Media Production program (hereafter SMP) as a concentration in its Communication Department (Donohoe, 2020).

Students within the concentration are entirely responsible for the technical side of the live productions: shooting, editing, replays, graphics, and audio mixing for approximately forty games per year. Coursework covers the basics of video production and editing, while a faculty member with live sports experience acts as the producer-director of the streams. Since the program's inception in 2019, approximately eighty students have participated, with audiences ranging from a few hundred to over ten thousand unique viewers.

ESPN requires that each basketball game utilize multiple cameras, a sound mix with both live and recorded sound, graphics, replay, and live editing. Meeting this demand necessitates a crew of a minimum of eight students: four on camera, one on replay, one on sound, one on graphics, and one technical director (ESPN, 2018). The games also require a central location to edit the camera and audio feeds, the ESPN-branded graphics, and replays. In the

case of Manhattan College (and other MAAC schools) this is a Mobile Production Unit, or MPU. The four-student camera crew works in the arena, either extremely close to the court, or on an elevator lift high above it, while the remaining four students work in the MPU immediately adjacent to the arena. The student crew is managed by a professor who interfaces with ESPN, functions as producer/director of the production, and teaches the Advanced classes.



Figures 1 and 2. Manhattan College ESPN Mobile Production Unit

To train students in each aspect of the productions, SMP includes four courses out of a required six that focus on technical practice and in-game performance: an introductory course where students learn and build upon basic skills, and three increasingly complex advanced courses. There are in-class and homework assignments given in each course to ensure that students become familiar with the equipment in lower-stakes environments before participating in the live productions. The “carrot” of the program is the chance to work on games that are streamed live on ESPN3 or ESPN+: students gain experience in a professional working environment, on productions that are seen by thousands of viewers, and may even make highlight reels on network television.

Since Manhattan College students essentially operate as a crew for a major cable and streaming network, their technical training in sports production is a priority. Due to the public/private nature of the concentration, its Learning Goals cannot be exclusively educational; the program could succeed in one respect, such as teaching production to college students, while failing to generate adequate content for ESPN in terms of quantity or quality. The program thus requires a clear pedagogical approach, as well as continual student and programmatic assessment within courses, to ensure that the students are up to the task.

Beyond this, SMP exists within Manhattan College’s School of Liberal Arts, and assignments and courses must be designed to ensure that students are not only learning specialized technical skills, but are also developing critical thinking, research skills, and problem-solving abilities. This paper is a small case study of the Sports Media Production concentration at Manhattan College, exploring how pedagogical concepts from Lev Vygotsky were used both in specific assignments and the overall journey through the program. I will concentrate on how students are prepared to work in a live production environment and conclude with a discussion of how SMP is linked to the concerns and needs of the Humanities.

## **Method**

### **Theory and Pedagogy**

Lev Vygotsky was an early 20th Century Soviet psychologist known for arguing that learning occurs via social interaction, thus tying individual cognitive development to the sociocultural realm. Because of Vygotsky's focus on the sociocultural, his theories are often contrasted to Jean Piaget's. While both theorists maintained the notion of relatively distinct developmental stages, Piaget foregrounded the child's attempt to understand the world via independent exploration, while Vygotsky emphasized the role of collaboration and socialization, using the image of a child interacting with a pre-existing social structure (see Vygotsky, 1978; Piaget, 1971). Piaget's work remains crucial to critiquing pedagogical models where teacher/lecturers are depicted as filling student brains with knowledge, but Vygotsky's emphasis on the importance of student-teacher interaction and peer collaboration has made his theories increasingly popular (Crain, 2010). Yuriy Karpov analogizes Vygotskian-influenced pedagogy through the idea of a tool: "an adult presents to the child a new psychological tool in the form of an external device and orchestrates and monitors the process of the child's use and mastery of this tool. As the child masters the tool, it gets internalized and turns into an internal mediator of the child's mental process" (Karpov, 2014, p. 18). In the case of film and video production, Vygotsky's theories are extremely useful, as the production process is most often collaborative, and "tools" are applied within settings that combine authority with extensive peer contributions.

The major Vygotskian technique allowing for student development within such a setting is the notion of scaffolding (see Bruner, 1997; Cole & Wertsch, 1996). Scaffolding is the practice of providing substantial initial support to the learner, and then, in stages, fading or finding alternate modes of support as the learner becomes more independent in the task. A common example is learning to ride a bicycle. Young learners often begin with the use of training wheels, which are removed when the learner becomes comfortable. Usually, an adult then takes over the role of steadying the bike. Eventually, if all goes well, the adult teacher removes their physical help, replacing it with verbal instruction and encouragement. Eventually the child learns to ride without any aid, although motivated children and adults can continue to learn advanced cycling techniques from experienced peers, mentors, books and magazines (Crain, 2010). It is possible to learn to ride independently outside of this structure, but early improvement is faster and later improvement far more productive if one considers the sociocultural aspects of bicycle riding. Racing, riding in traffic, efficient practices in group riding, high-speed downhill, and the like, are learned more efficiently - and more safely - collaboratively rather than through independent exploration.

Scaffolding does not necessarily require this shift from physical to verbal to written, although it is appropriate in learning physical skills such as riding a bicycle or operating a camera. Nor is it limited to young children, as college students and adults can both benefit from a pedagogy that offers slowly diminishing levels of support and ends with independence (see Davydov & Kerr (1995); Vasileva & Balyashnikova (2019), and Zhang (2010)). For example, Faizah Majid writes about using adult experiences as a means to scaffold the learning process, as a student group from diverse backgrounds and levels of familiarity with various aspects of education were provided scaffolds throughout a postgraduate teaching diploma (Majid, 2010).

Scaffolding is linked to another concept from Vygotsky known as Zone of Proximal Development (hereafter ZPD), defined as, “the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peer” (Vygotsky, 1978, p. 86). When using scaffolding, knowledge of a student’s present ability is insufficient; one also needs to understand the next level attainable by each student. This not only allows students to develop more systematically, but also enables collaborative learning among students at different levels. Using ZPD within scaffolding thereby opens up the learning process, making it possible for a student to learn from more advanced peers, while in turn offering help to students at a lower developmental stage. As Shabani et al. states, “the focus of teaching is on tasks inside the ZPD which the learner cannot do by him or herself but has the potential to accomplish with the guidance of others. As the learner accomplishes the task, his or her ZPD, or the gap between what he or she can do on their own and what he or she can only accomplish with assistance shrinks.” (Shabani, et al., 2010).

The idea of collaborative learning is directly tied to Vygotsky’s focus on the social nature of cognition; he argued that learning is more effective when engaging with more knowledgeable or skilled peers. Ibrahim et al. states, “learning is initially mediated on social levels among kids and the people in her/ his surroundings before being internally processed by them on personal levels... entail[ing] mentorship from more experienced people, whether they be peers or adults, who interact with less proficient people in the guiding or cooperation process.” (Ahmed Abdel-Al Ibrahim et al., 2023). The idea of the “group project” must become integrated into such a system, making it ideal for disciplines, such as production or theater, where groups are required to work together.

The role of the educator within this system is threefold. First, the teacher must develop modules and assignments with appropriate scaffolds that emphasize collaborative learning (Rojas-Drummond & Mercer, 2003). Second, the teacher must actively encourage students to learn from the experiences of those who are further in the program. Finally, teachers must ensure that each student is regularly assessed, so that they are met in their ZPD, and can be matched with peers from whom they can learn or assist at a particular task. Regular assessment is also vital due to how students fluctuate between zones as new skills and concepts are introduced. Students may simultaneously be a peer mentor at one task while being an inexperienced learner at another.

### **Application**

In using scaffolding to construct the program at Manhattan College, I focused on three aspects: a) relatively clear stages of learning, b) collaborative learning involving learners at different stages, and c) continuing assessment of each student’s level. Live video production, in a concentration that combines classroom exercises with intense group experiences, can be adapted to fit all three of these requirements. For the stages of learning, I begin with the five pieces of equipment students need to learn at the five different positions. There are developmental goals to meet before a student can go live, and classroom activities are devised to allow students to work on the skills they will need on the games. For example, students usually begin with camera operation; each camera operator learns what to shoot while also controlling different aspects of the camera, including focus, white balance, composition/framing, and exposure. Assignments and classroom activities, based on those from more traditional

remote and studio video production classes, were rewritten to push each student to the next stage of development in each area.

For b) collaborative learning, each production uses students from four different classes taught by two faculty members. Having students at different levels, in the classroom and in each game's crew, allows for instruction to come from one of the instructors, an advanced peer, or a peer at a similar level. One of the early advocates of scaffolding, David Wood, referred to this as "intersubjectivity," a "temporary shared collective understanding or common framework among learners or problem-solving participants" (Doo, et al. 2020, p 62). Here, the "common framework" is the general goal of producing the games, and this framework motivates the information and technique sharing even outside of the game context.

For c) continuing assessment at every level, the small classroom and homework assignments are regularly assessed individually and in group critique. These assessments do not necessarily impact their grade, which is based on multiple factors, but instead structures their movement through the program. This process continues until students reach the Advanced courses and begin working the games, at which time they are solely assessed on their in-game work.

The goal of the program is known as "transfer of responsibility," where learners take ownership of their present skills and further improvement, allowing them to perform and improve independently while becoming peer mentors themselves (Wood, 1976). For SMP at Manhattan College, transfer of responsibility takes place in at least two different ways. First, when students become advanced enough to become mentors at a particular position, which happens at varying times based on the complexity of the equipment and the talent and motivation of the student. Second, when students achieve a high level of competence on the equipment, often by showing they can correct errors with automaticity during a game, which implies that they no longer need faculty mentorship but can function with occasional peer help. More significantly, transfer of responsibility is crucial for students in becoming lifelong learners, a major objective of college Humanities programs (Atchoarena, 2021).

#### *Assessment Vehicles and Scaffolds*

While there are five student positions - camera operator, replay, sound, graphics operator, and technical director - the introductory class focuses on the camera. Camera operation is the least stressful of these positions due to the four-camera set-up of our games; only one camera operator is "live" at a given time, so, unlike with other positions, the other three operators can take short breaks where they briefly drop their attention or reset various camera functions. In their first class of the Introductory course, camera operation is explained and demonstrated, after which students complete a quick in-class assignment. Upon returning to the classroom, students engage in analysis, refereed by the professor but including peer and self-critique; generally, students are ready to give at least a few examples of what went wrong with their short clips. During this process, the instructor notes each student's general level and assigns them a position on the ZPD, after which individual and group homework assignments are given based upon these results. At each position student tasks vary greatly. For camera operation, these include set-up: unpacking the equipment, attaching the battery, mounting the camera on a tripod, cabling,

and the like. There are also start-up tasks, based on lighting and camera position, that may need to be modified during the game: white balance and exposure. Lastly, there are performance tasks that require a live game to practice fully, including focus, camera movement, and composition in following in-game events. The initial set-up tasks usually involve only a few repetitions, so we did not include those in the study. The start-up and live performance tasks can be further divided into levels; repetition is not enough, particularly for the live tasks, as improvement requires critique and conscious practice of the skills. At the highest level, movement and composing shots for live sports are high-order performance activities and are arguably their own kind of art form; this level was infrequently discussed, and not assessed among the students. Students may be better at some skills than others; this is noted on internal assessment and shared verbally during individual meetings. Since the most difficult of these skills tends to be composition and movement, initial homework includes work with their phones rather than the much-larger game cameras. Exercises involve the creation of smooth pans and tilts, using traditional composition rules such as the rule-of-thirds, and similar short assignments. These mini-exercises are also done as groups and work as scaffolds; if a student hits lower than expected on an assignment based on their ZPD, they are given remedial help or encouraged to repeat the assignment.

### *Zone of Proximal Development*

The basic concept of ZPD can be graphed by the following pyramid, adapted from Kiruthika Ragupathi (Ragupathi, 2014):

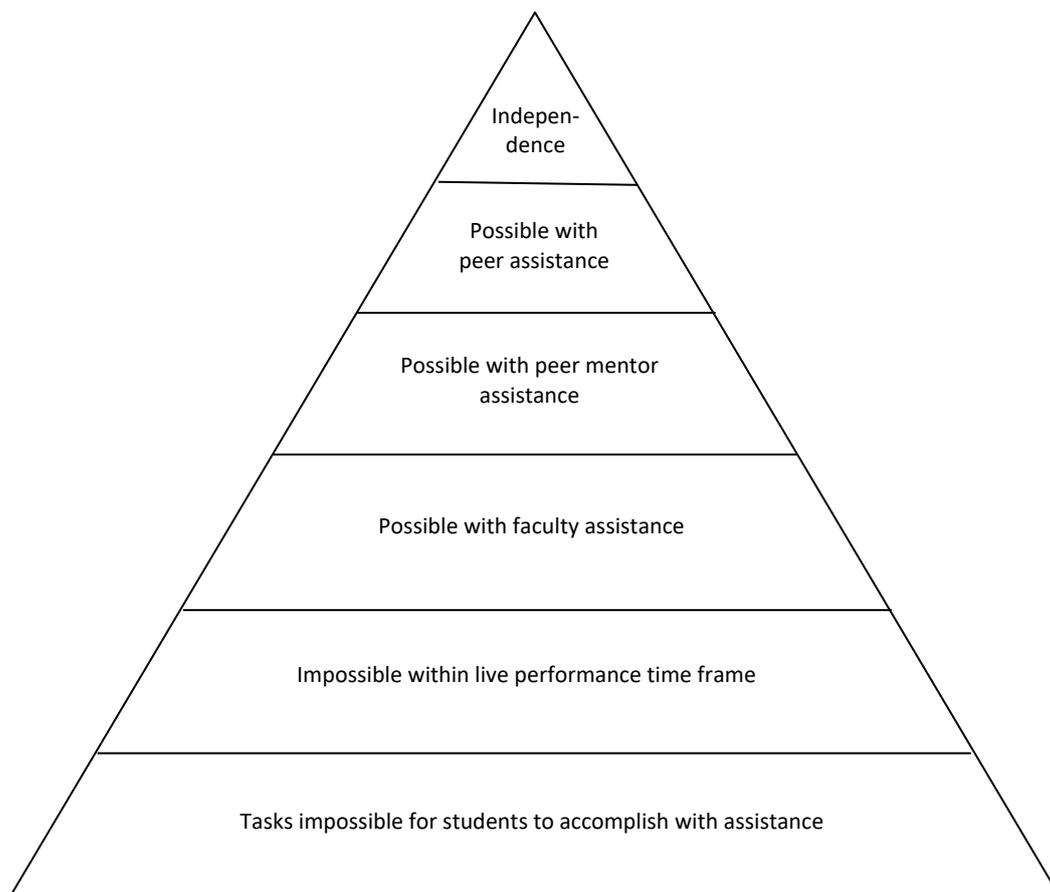


Figure 3. ZPD Pyramid

We divide the tasks into 5 levels, from work that is doable independently, to tasks that are impossible for students to replicate live; the “impossible with assistance” level is skipped in assessment. When, at a given skill, students achieve the level of “possible with peer mentor assistance,” they are ready to shadow a camera operator and possibly participate directly in the production.

Table 1 shows our division of camera operation into a set of skills that go into each student’s Zone of Proximal Development. Five skills are included, with “camera movement” divided into two, depending on how the camera is mounted: rig or tripod. For each, advice and modeling activities are given before an assignment or a game, again according to their ZPD.

Table 1. ZBD Camera Operation (shared with students)

	A	B	C	D	E
1 Focus	Locate	Set Pregame	Half Court	Focus Pull: still	FP: moving
2 Exposure	Locate	Set Pregame	Full Court	Fast Break	Sudden change
3 WB	Locate	Set Pregame	Lighting Change	Rapid Reset	Live Reset
4 Composition	Find Ball	Follow ball	...half court	...full court	...sudden action
5a Tripod	Pan/tilt	Smooth p/t	...maintain	...fast action	...sudden action
5b Rig	Steady...	...wide	...medium	...close up	...sudden action

*Assessment discussion – rubric*

Table 2 is based on the zones from table 2 and is the primary rubric used for camera operation assessment. As with table 2, camera operation is again broken down into five skill areas: focus, exposure, white balance, composition, and camera movement. Each of these areas consists of five levels, from beginner to advanced. Once students reach an average “satisfactory” level on the skills, they are allowed to operate a camera during a game; by this point they have usually shadowed a peer camera operator at least once. Once students reach the “accomplished” level on three of the four skills, they can become a peer mentor. Ideally, “accomplished” students can also begin working on another position so they learn the entire production suite.

Each of these five skill areas has its own set of practice routines that are based on scaffolding, with homework assignments given at each level. For example, a beginner student will be asked to perform the five skill areas at a basic level in creating a short video of a person walking. An intermediate student might be asked to mentor a beginner student, while performing the five skill areas at a higher level, with a more complex subject such as a person running randomly. These homework assignments are critiqued as soon as possible, since immediate feedback allows students to link their physical movements to the video results. If a student finds a homework assignment difficult or otherwise seems stuck at a level, the instructor will give advice or demonstrate specific movements or camera settings, or a peer might demonstrate the entire process. Since these skills are all utilized

during the games, student improvement links directly to their ability to perform live.

Table 2. Camera Operation Assessment/ZPD Placement

	0	1	2	3	4
Focus	Out of Focus (OOF)	Sometimes OOF	Occasional OOF	OOF Movement only	Consistent focus
Exposure	Too Dark/Light (TD/TL)	TD/TL, adjustments	TD/TL, Moving shot	Moving adjustments	Proper exposure
WB	Off, no reset	Off, minimal reset	Off, some reset	Good WB	Good WB during change
Composition	Lost ball consistently	Minimal adjustments	Regular adjustments	Solid composition	In sudden changes
Movement	Ball not followed	Followed infrequently	Generally followed	Consistently followed	Smooth movement

**Assignments**

Students begin the Introductory class with limited ability to use the camera; they are taught the basics in the classroom, and then immediately taken to the court to shoot practice footage: short assignments that replicate what they will do during the productions. For camera operation, there are two assignments that are repeated twice, for a total of six assessments.

Weeks 1, 4 and 9 place the student under and behind a basket to shoot two minutes of practice footage; this replicates cameras 3 and 4 (see Figure 4 for the position and Figure 5 for the shot). This is the most difficult camera position, since students are very close to the action and it is easy to lose sight of the action.



Figures 4 and 5. Camera 3 Position and Shot

The assignments for weeks 2, 3 and 7 are from a camera above the action, replicating cameras 1 and 2 (see Figure

6 for the position; Figure 7 is the shot).



Figure 6 and 7. Camera 1 Position and Shot

For both assignments, students set up the camera (either on a rig or tripod), set the white balance and exposure, and attempt to follow a practice shoot-around while maintaining focus and good composition while following the ball. After each assignment is completed, students head to the classroom and watch the assignment as a group, for the purpose of in-class critique. After Week 1, students are grouped into pairs, which accelerates set-up time and gives each student someone to bounce ideas off. At some point during the semester, after the games begin, the introductory students are unofficially paired with a student mentor from the Advanced class.

## **Results**

For this project I followed four students over two years, all of whom took the introductory Sports Media Production class in Fall 2021, moved onto the Advanced course, and became regular crew members by Fall 2022. The results are based on the assessments made during the semester of the in-class assignments and game footage. The project concluded with a questionnaire about each student's experience approaching graduation. This enabled students to self-identify their level of achievement and understanding of live production upon entering the program, along with their views of their experience upon graduation.

### **Introductory class Results – Camera**

For the assessments, a 2.0 average - the “satisfactory” level - was deemed sufficient to allow students to work the games on the equipment, the equivalent of “possible with peer mentor assistance” from the ZPD graph. For this class, the two weaker students were paired with the stronger students based on initial assessment (see Table 3 for results); here, “weaker” and “stronger” are relative terms, as all of the students were still considered beginners.

By exercise 3, as shown in Table 4, the students had made significant progress. Working together they were able to set the camera functions more quickly, thus enabling them to improve their shot composition during live action. The immediate in-class critique during Week 1 had also allowed them to analyze their errors shortly after making

them. Student A had made significant progress and was already deemed ready for game action on camera. Student D had made the least progress, and their ZPD was adjusted accordingly, meaning simply that they needed an intermediate scaffold - and more help - to complete the work at a satisfactory level.

Table 3. Week 1 Results (Camera 3)

	Student A	Student B	Student C	Student D
Focus	1	1	1	0
Exposure	1	1	2	1
WB	1	1	1	1
Composition	0	1	0	0
Movement	0	0	0	0
Mean	.6	.8	.8	.4

Key:

0 = Beginner

1 = Developing

2 = Satisfactory

3 = Accomplished

4 = Advanced

Table 4. Week 3 results (Camera 3)

	Student A	Student B	Student C	Student D
Focus	2	2	2	2
Exposure	2	2	2	1
WB	2	1	2	1
Composition	2	2	2	1
Movement	2	2	1	1
Mean	2	1.8	1.8	1.2

By week 9 all four students had worked as shadows for students in the advanced class. As shown in Table 5, this had pushed them all to another level: three of the four students were deemed ready for game action on camera 1, while the more advanced student was moved to cameras 3 and 4. The fourth student's improvement was slower but ongoing.

Table 5. Week 9 results (camera 3)

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	Student A	Student B	Student C	Student D
Focus	3	2	2	2
Exposure	3	3	3	2
WB	3	3	3	2
Composition	3	2	2	2
Movement	2	2	2	1
Mean	2.8	2.4	2.4	1.8

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**Advanced class results – Camera**

All four students took the Advanced class the semester after the introductory class. All four were also immediately placed in the crew and were given students from the Introductory class to mentor. Assessments for other equipment either began or continued, most notably the replay system and the switcher. Table 6 is the camera assessment from in-game footage for each student, showing that all four students had improved significantly by their second semester. Student A was on camera for a sequence that was shown on ESPN Sportscenter. Student D had also significantly improved, something they attributed in their questionnaire to the peer instruction during the games.

Table 6. Advanced Class In-Game analysis

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	Student A	Student B	Student C	Student D
Focus	3	2	2	3
Exposure	3	3	3	3
WB	3	3	3	2
Composition	4	3	3	2
Movement	3	2	2	2
Mean	3.2	2.6	2.6	2.4

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**Exit Questionnaire Results**

The exit questionnaire allowed the four students to self-report their own opinions about the learning process after they completed the concentration. The first two questions relate to how comfortable they felt on the equipment;

before in-class training, after training but before shadowing and peer mentorship, and after their production experience was over. Table 7 shows the numerical results; the students felt themselves to be improving via the pedagogical system implemented in the courses. (Note: Graphics and Switcher results use a sample of 3 rather than 4).

Table 7. Questionnaire results

	Camera	Sound	Replay	Graphics	Switcher
Before training	2.5	2	1.5	0	2
After Intro course	3.5	2.75	2.5	3.67	3.33
Program completion	5	4.25	4	4.33	4.33

Key:

0 = never trained on position

1 = least comfortable with position

5 = most comfortable with position

The “before training” numbers are significantly higher than those reported in the in-class, teacher-response rubrics; the implication is that the graduating students exaggerated, or have perhaps forgotten, their level at the beginning of the course. Note that “graphics” and “switcher” positions were taught in the Advanced class, so these were not part of this project. “Sound” was trained outside of the mentor system, using a one-on-one student-professor interaction; perhaps surprisingly students felt least prepared after this style of training, as opposed to the combination of peer and professor instruction.

When asked to describe the most effective teaching method, all four of the students self-reported that the peer system was the most effective. One student replied, “I primarily learned from my fellow peers/students. If I had questions, I usually went to one of them first before I considered going to one of my professors,” while another answered, “The great thing about the program is how close all of us students are, it allows for a great atmosphere where we all feel comfortable teaching the younger students. A specific example was during my senior year I taught two of the first-year students how to operate the baseline cameras [aka, camera 3 and 4] during a basketball game. We went over how to set the camera up, how to properly adjust the settings (white balance, etc.), and how to shoot during the game.”

### Discussion of Results

The results – both our rubrics and the successful implementation of the program - show that the students were able to learn quickly using techniques devised from Vygotsky: collaborative learning and scaffolding based on regular assessment of their Zone of Proximal Development. Our students generate approximately 120 hours of

streamed video content for ESPN yearly, all of which at least approach a reasonable level of competence and is in most cases indistinguishable from other MAAC productions done by professional contractors. Our evidence for this is threefold. First, in 2020 and 2021, producer-director Joe Ruggiero was invited to take four students and the production truck to Atlantic City to produce and stream games for the MAAC tournament. Second, in 2023, Manhattan College was named a finalist in the "Collegiate Student – Championship" division of the College Sports Media Awards. Lastly, to date, two of the four students are working professionally in the sports production field; both received job offers before graduating and began their careers while finishing their degrees. A third is headed to graduate school.

This is not to say that there were no issues in designing and implementing the project. Most obviously, it goes without saying that a sample of four is extremely limited. For the 2019-2020 year the program was still in development, and we engaged in only minimal assessment. 20-21 was a lost year due to the pandemic; while games continued, the restrictions made hands-on instruction extremely difficult. This project began with the small 2021-2022 cohort of introductory students; as the program grows, our data set will grow substantially.

Beyond the small number of students is the lack of a control group who is learning production in more traditional ways. As my department teaches TV Studio and Advanced TV Studio using more traditional top-down instruction, unlinked to ESPN or any other media companies, this is the next phase of my project: comparing the scaffolding and peer mentorship pedagogies of my program to a more traditional TV studio curriculum.

There are also concerns with the design of the program as it grows. First is the amount of time devoted to assessment and critique. The weekly assignments, in-class projects, and continual assessment generated substantial paperwork that is simply not sustainable as we scale up the program. However, from my perspective, the workload was validated by the novelty of the program; in Fall 2022 the introductory course contained nine students, and some of the assessment was done via immediate verbal feedback instead of written rubric. Second, scaling up the program will greatly complicate the peer mentorship aspect. For example, it is possible that only a handful of the top students will function as peer mentors given the difficulty of managing mentorship among dozens of students. These advanced peers may eventually function as de-facto teaching assistants, being responsible for filling out rubrics and possibly receiving a stipend for their work.

At a meta level, a common critique of using scaffolding is that it can excessively rote, that students worry more about reaching assessment milestones, as articulated in assignment rubrics, rather than developing independence in their skillsets. For example, Kate Wilson and Linda Devereux discuss the pitfalls of an excessive reliance on skills, arguing that, “a ‘skills’ interpretation of the ZPD which reduces and simplifies learning to a lock-step process can have a constraining effect on student development...teacher support should make the task accessible (rather than simplifying); emphasize engagement and participation (rather than task completion); accept partially correct answers (rather than perfection); and make the task explicit so as to avoid pitfalls.” (Wilson & Devereux, 2014, p A93). I would argue that, at least in this case, the goal-driven nature of the program prevents any potential obsession with the assessment process. While they can receive a great deal of help from instructors and peers in getting there, students are aware that independence is the goal, and that the various assignments are the way to

achieve it. However, this is a concern for which we are on the lookout; we do not want accidentally to limit student creativity in an attempt to foster it.

### **Conclusion: Vygotsky and bridging the STEM-Humanities divide**

As of the end of the 2022-23 basketball season Sports Media Production at Manhattan College, while still a quite small program, has been successful by every measure: in-class outcomes, student achievement, post-graduation employment, awards, and not least our streaming partner's satisfaction. However, one of the more complex aspects of the program lay outside the purview of the study. Sports Media Production operates as part of a department and School that emphasizes the liberal arts, with the assumption that traditional liberal arts and Humanities principles - critical thinking, historical contextualization, problem solving, research skills - are part of all concentrations within each major. Students in the sports media concentration must develop skills sufficient for ESPN's streaming services, while continuing more traditional courses and projects within the liberal arts and Humanities traditions both in and out of the Communication Department. This is an ongoing concern in the program, and I will conclude by discussing how it is addressed.

#### **The Liberal Arts and Vygotsky**

There is much debate on the purpose of Humanities education in the 21st century, and how a skills-based education might provide an easier path to a career. As Christopher Rim puts it in *Forbes Magazine*, "A failure to recognize the methodology at the heart of liberal arts education results in mutual misunderstandings between those in the liberal arts and in STEM-related disciplines. Liberal arts colleges and their faculty often cannot articulate to prospective students the value of liberal arts education as a pedagogical approach rather than simply a disciplinary focus, which produces graduates who also struggle to relay to prospective employers this value" (Rim, 2023).

While University administrators and commentators on higher education are often encouraging a shift to more skills-based coursework, there can be faculty resistance within colleges that have traditionally focused on the Arts and Humanities (Shelton, 2020). Donald Gleason offers five approaches for the Humanities in dealing with STEM: from serving STEM departments in an instrumental relationship with classes such as "Science Writing" to ignoring STEM altogether and continuing in the most siloed manner possible (Gleason, 2020). While SMP would seem to be meeting the most instrumental version of Gleason's five, an instrumentality accentuated by the public-private partnership aspect, this is not the case. Instead, the games are the skills-based carrot that allows students to leverage their love of sports into a discipline that requires a number of different approaches. SMP faculty strive for what John Carrell, et al., refer to as humanities-driven STEM, emphasizing "humanistic, often artistic, creative problem-solving and innovative thinking" (Carrell, et al, 2020). SMP at Manhattan College is an attempt to bridge this STEM-Humanities divide by including more traditional Humanities-driven coursework and assignments: interviewing athletes and producing videos on racial justice and gender equity, assignments that combine writing and presenting in explorations of the historical and cultural significance of sport, or research assignments that ask students to assert and defend ethical arguments. We also plan on collaborating with our Digital Arts & Humanities program to bring data analysis and digital representation to areas within sports studies:

analytics, explorations of sport history, emerging sports such as pickleball, and e-sports. While students leave the program with a marketable set of skills and a good interview story that begins, "I worked camera for ESPN," we want students who can ask questions that require varied types of solutions, and we offer a number of different tools to answer them. While the Vygotskian techniques we have implemented are ideal for teaching skills, there is research suggesting that techniques of collaborative learning, iterative assignments, and clear steps for development based on their ZPD, are all useful for broader pedagogical outcomes.

### *Collaboration*

Historically students are uncomfortable with "group projects," likely because of the differing amounts of work produced by individual students, leading to a sense of unfair workloads and grading. One solution is individual grading of a group project, but this can be difficult in practice and does not necessarily solve the common student perception of unfairness. However, based on our program completion questionnaire, students appreciated, rather than resented, that they functioned as part of a group, offering both mentorship and requesting help. I attempt to replicate this in our studies-based courses through weekly reading reports, where students choose and report on readings on topics they select as a group, combined with peer mentorship, where the previous week's student chooses a reading for the following week's student and offers notes and advice. As M.A. Nguyen argues, "This activity gives the copying student an opportunity to achieve a higher performance when working with a more capable one and as a result, everyone in the group would contribute greatly to the collective success, by sharing their past experiences and prior knowledge, and thanks to these experiences make sense of new situations, as Vygotsky repeatedly stressed in his approach." (Nguyen, 2017).

### *Iterative Assignments*

One of the common techniques used in writing classes is the draft: student papers are commented on by a teacher or peer, after which they are rewritten based on the comments. Combining this with the notion of collaboration, students can rewrite and build upon each other's drafts, a technique Gen Z students are perhaps more familiar with due to the crowd-sourced nature of social media, where users continuously build upon pre-existing memes and media content. This addresses the unfairness problem, as students can point to their own work through comparison with earlier drafts, while maintaining the notion of a group collaboration.

As SMP continues to develop, the notions of collaboration, iterative assignments, and scaffolding will remain crucial in the creation of projects that move away from production-based skills towards more traditional Humanities projects.

## **References**

Ahmed Abdel-Al Ibrahim, K.; Cuba Carbajal, N.; Zuta, M. E. & Bayat, S. (2023). Collaborative learning, scaffolding-based instruction, and self-assessment: Impacts on intermediate EFL learners' reading comprehension, motivation, and anxiety. *Language Testing in Asia*, 13(1).

- <https://doi.org/10.1186/s40468-023-00229-1>
- Atchoarena, D. (2021). Universities as lifelong learning institutions: A new frontier for higher education? Land, H.,; Corcoran, A. & Iancu, DC. (eds) *The Promise of Higher Education*, 311-319. Springer Publishing. [https://doi.org/10.1007/978-3-030-67245-4\\_47](https://doi.org/10.1007/978-3-030-67245-4_47)
- Bruner, J (1997). Celebrating divergence: Piaget and Vygotsky. *Human Development* 40: 63-73. <https://doi.org/10.1159/000278705>
- Carrell, J.; Keaty H. & Wong A. (2020). Humanities-driven stem—Using history as a foundation for STEM education in honors. *Honors in Practice* 16: 53-69.
- Cole, M. & Wertsch, J. (1996, Sep). Beyond the individual-social antinomy in discussions of Piaget and Vygotsky. *Human Development* 39: 250-256. <http://doi.org/10.1159/000278475>
- Crain, W. (2010). *Theories of development: Concepts and applications*. Psychology Press.
- Davydov, V. V. & Kerr, S. T. (1995). The influence of L. S. Vygotsky on education theory, research, and practice. *Educational Researcher*: 24(3): 12–21. <https://doi.org/10.2307/1176020>.
- Donohoe, C. (2020, Winter). Ready for prime time. *M: Manhattan College Magazine*: 32-37.
- Doo, M. Y.; Bonk, C. & Heo, H. (2020, Sep). A meta-analysis of scaffolding effects in online learning in higher education. *International Review of Research in Open and Distributed Learning* 21(3): 60-80. <https://doi.org/10.19173/irrodl.v21i3.4638>
- ESPN (2018). *ESPN3/ESPN+ School productions broadcast manual*. Retrieved from [https://s3.amazonaws.com/sidearm.sites/maacconf.sidearmsports.com/documents/2018/10/16/2018\\_ESPN3\\_School\\_Productions\\_Broadcast\\_Manual\\_docx.pdf](https://s3.amazonaws.com/sidearm.sites/maacconf.sidearmsports.com/documents/2018/10/16/2018_ESPN3_School_Productions_Broadcast_Manual_docx.pdf)
- Gleason, D. W. (2020). The humanities meet STEM: Five approaches for humanists. *Arts and Humanities in Higher Education* 19(2): 186–206. <https://doi.org/10.1177/1474022218806730>
- Karpov, Y.V. (2014). *Vykotsky for educators*. Cambridge University Press.
- Majid, F. A. (2010). Scaffolding adult learners’ learning through their diversity: An action research. *Procedia – Social and Behavioral Sciences* 7: 235–239. <https://doi.org/10.1016/j.sbspro.2010.10.033>
- Mulholland, M. (2022, Aug 17). Longtime MAAC commissioner Richard Ensor announces his retirement. *Inspirus Sports – News Posts*. <https://www.inspirussports.com/post/longtime-maac-commissioner-richard-ensor-announces-retirement-at-the-end-of-2022-23>
- Nguyen, M.A. (2017). Liberal education and the connection with Vygotsky’s theory of the zone of proximal development. *Cultural-Historical Psychology* 13(1): 81-88. <https://doi.org/10.17759/chp.2017130108>
- Piaget, J. (1971). The theory of stages in cognitive development. In D. R. Green, M. P. Ford, & G. B. Flamer, . *Measurement and Piaget: Proceedings of the CTB/McGraw-Hill Conference on Ordinal Scales of Cognitive Development*. McGraw-Hill.
- Ragupathi, K. (2014, Apr). Virtually Vygotsky: Using technology to scaffold student learning. *Technology in Pedagogy* 20. <https://blog.nus.edu.sg/cdtkdr/2015/04/25/scaffold-student-learning/>
- Rim, C. (2023, Jan 13). The problem facing liberal arts education is not subject matter-it's application. *Forbes Magazine*. <https://www.forbes.com/sites/christopherrim/2023/01/11/the-problem-facing-liberal-arts-education-is-not-subject-matter-its-application/?sh=60cd7db62bd3>
- Rojas-Drummond, S. & Mercer, N. (2003) Scaffolding the development of effective collaboration and learning. *International Journal of Educational Research* 39: 99–111

- Shabani, K.; Khatib, M. & Ebadi, S. (2010). Vygotsky's zone of proximal development: Instructional implications and teachers' professional development. *English Language Teaching* 3(4): 237-248. <https://doi.org/10.5539/elt.v3n4p237>
- Shelton, P. (2020). The digital badge paradigm: The shifting change in higher education from traditional degree-based learning to skills-based learning. [Doctoral dissertation, Saybrook University]. ProQuest Dissertations Publishing.
- Vasileva, O. & Balyasnikova, N. (2019). (Re)Introducing Vygotsky's thought: From historical overview to contemporary psychology. *Frontiers in Psychology* 10: 1515. <https://doi.org/10.3389/fpsyg.2019.01515>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Wilson K. & Devereux L. (2014). Scaffolding theory: High challenge, high support in academic language and learning (ALL) contexts. *Journal of Academic Language and Learning* 8(3): A91-A100. <https://journal.aall.org.au/index.php/jall/article/view/353>
- Wood, D.; Bruner, J. S. & Ross, G. (1976). The role of tutoring in problem-solving. *Journal of Child Psychology and Psychiatry and Allied Disciplines* 17: 89–100.
- Zhang, J. (2010, Apr). Vygotsky's thinking: its relevance to learning and education. *Mind Culture and Activity* 17(2):188-190. DOI: 10.1080/10749030902818410

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