Chapter 9
Three A's to Inclusive Access: Tarrant County College's Case Story

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Introduction

Inclusive access—"TCC Plus"—provides a digital textbook option for students, which may include other ancillary tools for both faculty and students at a lower cost. This option was established to be equal or higher quality/lower cost than the present educational material being used by students for their respective courses. In addition, it would be accessible to students on the first day of class or sooner, with a print option at an extra cost (which would be less than what they are currently paying). In the event the student did not wish to buy this material and use a hardback textbook, the student could simply opt out and purchase the material on his or her own.

TCC Plus is a new educational material (textbook) model for the college that is taking force across the education landscape. The outlook of textbook publishing shows to be moving toward producing cost-effective digital versions due to the increased costs of hardcopy production—including delivery, inventory, storage, and human resources. The TCC Plus initiative was established in collaboration with top publishers to provide textbooks in a digital context fully realizing the great success industry has had with supply chain partnerships. A cross-functional project team (Appendix A) worked diligently to ensure strategic planning and implementation of the pilot for Spring 2018. Pilot participants included 23 faculty members (Appendix B) who were "early adopters" of the program. The general district administration process can be found in Appendix C. District administration approved to extend the pilot to Fall 2018 by welcoming current and additional participants. Fall 2018 expanded to 88 sections. Additionally, the program expanded to a soft launch in

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Spring 2019 when faculty interest in the program ballooned to 189 sections. Summer 2019 went to 65 sections and Fall 2019 was the largest thus far with 261 sections. TCC expects the program to continue to grow; however, that growth has required much effort on the part of several key stakeholders at the institution. In this case study, we tell the story of inclusive access at TCC thus far.

Problem Situation

TCC is a public higher education institution, which provides 2 years' associate degrees and technical certificates with campuses located in Fort Worth, Hurst, and Arlington, Texas. Approximately one in every 22 Tarrant County residents takes a class at TCC each year. Fall 2017 credit enrollment was more than 52,000 students.

According to McKenzie [3], statically, 50% of community college students in the nation do not buy textbooks/educational material. This was also corroborated by the Inside Higher Education Leaderman [2] survey of 400 students whereby 42% of the students said they had "avoided purchasing the course materials at all." TCC student statistics reflect the same behavior. If the McKenzie statistics [3] holds true, the lack of educational materials also impacts student success in the form of lower grades. Leaderman [2] results indicated that over 66% of the surveyed students felt they could have done better academically if they had access to the course materials on the first day of class. TCC Plus began its journey with students first in mind. The goal of TCC's inclusive access program was to provide cost-effective course material to students. TCC feels that we can move this needle by making textbooks affordable and having educational materials on hand the first day.

Textbook publishing is also moving towards cost-effective digital versions. This has come about from the necessity of survival of the publishing industry. Instead of moving paper all over the world right now, they realized that by using a digital platform or digital courseware, educational materials are now becoming increasingly more affordable. However, when we looked at this scenario solely from a finance perspective, we asked, "How could we reduce the total cost to students?" When analyzed, the total cost of education is very difficult for us to reduce. Costs such as operations of the college or tuition leave little room for cost reductions. TCC has one of the lowest tuitions in the nation at a $64 per semester hour for in-county tuition. Therefore, educational material is the only area that we can significantly reduce the total cost for student education. At 2-year higher educational systems, we are sensitive to the costs students spend on tuition as much as they spend on textbooks. Our preliminary data found that 8.4% of our students believe that they do not need a textbook because it costs too much. Therefore, the reduction in the cost of textbooks is something that can really impact the lives of students.

Background

Dr. Mark McClendon, vice-chancellor of finance, and Dr. Tyson McMillan, professor of computer science, cochaired a cross-functional task force to plan and implement this initiative. Dr. McClendon has areas of responsibilities include purchasing, financial services, business services, auxiliary services, and police and emergency services. Dr. McClendon's educational background is a bachelor's and master's degrees from the University Arkansas and an MBA from the University of Chicago and an EdD from Vanderbilt Peabody College of Education. Dr. McMillan is a professor of computer science at the TCC Trinity River campus. He is also a past Joint Consultation Committee (JCC) chair and elected leader of the district faculty association. Additionally, Dr. McMillan serves as department chair of computer science and is a proud TCC alumnus. Dr. McMillan finished the associate degree after completing the PhD. His background is in both business and technology with a Bachelor of Business Administration in computer information systems, Master of Science in information and technologies, and a PhD in information science. The collaboration of McClendon and McMillan was no doubt a vital key to the success of the project.

TCC created a cross-functional project team to develop an inclusive access program that works best for this initiative (see Appendix A). From the beginning, leadership strategically included individuals from various stakeholders that would actually work and corroborate with the most critical areas to make this initiative happen. Members of the team not only had a voice, but a responsibility for the ultimate success of the program. Dr. McMillan recommended that the academic representatives should be leading the way. He, in parallel, ensured that the faculty senate would be included in the discussions. We included operational departments such as the registrar, business services, technology, finance, and academic curriculum committees, as well as a campus president. We selected a team in which members had a key role to research and strategize for a solution and implement the TCC Plus program. Accordingly, students have an option to select an inclusive access course and thereby have an affordable opportunity to succeed.

The TCC theme is simple: student focused, faculty driven, and administratively supported. At the time of this case study, we created processes, procedures, and data points from Spring 2018 to Fall 2019. In particular, this work focuses on the process that TCC went through to make the decision to start the program, why we did what we did, the elements of our program, and future plans. TCC Plus is about being persistent to maintain our course to ensure a student receives every opportunity to graduate. Inclusive access at TCC is all about affordability for our students.

TCC Plus is a fundamentally new approach whereby we created a one-college triad. One of the charges given by the chancellor, Eugene Giovannini, was that faculty would be at the forefront of this initiative and he wanted to make sure that administration could alleviate some of the administrative workload. He also wanted to ensure that the process was seamless to the students and the college worked as a single organization. TCC Plus is about our journey to meet this important charge (see Fig. 9.1).

Fig. 9.1 TCC plus triad
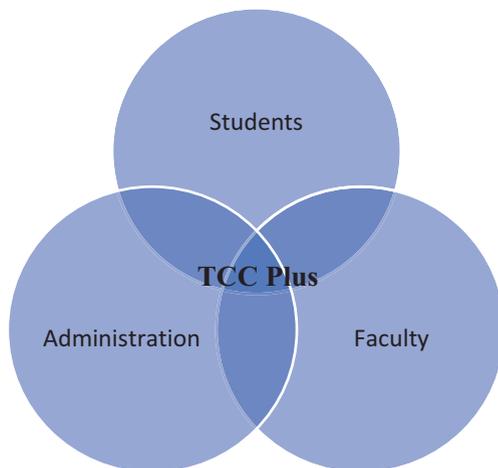
TCC's Solution

The cross-functional team with various key stakeholder areas was necessary for the implementation of this initiative (Appendix A). Innovative ideas emerged from each meeting. One such idea was that we needed to brand this program in a way that appealed to the students of TCC.

Branding

We know that students have many distractions so a way to capture their attention is vital. How did we arrive at TCC Plus? We really wanted to have branding that was crisp and concise due to character limitations on our online screens used during registration.

Branding initial considerations established:

1. We wanted to have branding that was broad enough to allow for durability and longevity:

    (a) With an option to expand in the future with different aspects that we wanted to do

2. A simple icon for presentation purposes to our various stakeholders:

    (a) We wanted to underscore the program as a value proposition in order to save time and money.

We looked at several ideas to associate the brand itself and ultimately arrived at TCC Plus.

Fig. 9.2   TCC plus branding

The process involved interaction with a student focus group and a focus group of advisors and narrowed it down to two names. One was considered popular among the advisors by a 4 to 1 ratio, but TCC Plus was popular among the students. We gave the students a voice (i.e., student-focused concept) and the students' choice of TCC Plus became the brand for the program.

Resulting Brand

The icon (Fig. 9.2) was designed to work well on various backgrounds for multiple backgrounds, whether digital, online, or paper.

Program Mission

Our mission was to accomplish two objectives; however, as we started, we initially only wanted to reduce cost. Lower cost would produce a measurable outcome, so that anybody who analyzed the benefits would concisely and decisively select this option and see its merits. The second objective was driven from the academic side, students having course material on the first day of class, and the benefits of having these on the first day of class.

Spring Pilot 2018

We initiated our TCC Plus initiative with a pilot in the Spring 2018 term. The pilot was launched with 23 sections from faculty who had volunteered as early adopters or technology-savvy faculty. The 23 sections yielded a student enrollment of 617. The results are reflected in Table 9.1. Student savings per course ranged from $60 to $200 depending on the course discipline with average savings of $90/per student per course. The total savings was $56,000 for all students which can be found in Table 9.2.

From the beginning of the program, a diversity of disciplines was represented. The academic disciplines included business, management, chemistry, computer science, education, English, government, history, math, music, psychology, and

Table 9.1 TCC plus Pilots
description and outcomes

Semester	Sections	Students
Spring 2018	22	617 (actual)
Fall 2018	88	2640 (approximate)
Spring 2019	189	5670 (approximate)
Summer 2019	62	1860 (approximate)
Fall 2019	261	7830 (approximate)

Table 9.2 Spring 2018 data

Inclusive access Spring 2018 Pilot[a]					
Course description	Student enrolment	Cost to students[b]	Retail cost[c]	Savings/ student	Savings per section
BCIS-1305-21001	24	$120	$229	$109	$2607
BCIS-1305-41009	19	$120	$229	$109	$2065
BUSI-1301-40219	23	$51	$126	$75	$1734
BMGT-1301-86123	28	$96	$166	$70	$1958
BUSI-1301-86124	16	$96	$213	$117	$1865
CHEM-1405-11209/11208	45	$94	$151	$57	$2553
CHEM-1406-51100/51105	47	$94	$263	$170	$7973
COSC-1301-30019 (cancelled)	0	$120	$218	$98	$0
COSC-1436-57005	29	$66	$176	$110	$3186
COSC-1436-40398	29	$66	$176	$110	$3186
EDUC-1301-11049	21	$27	$111	$85	$1775
ENGL-1302-41521	17	$19	$57	$38	$647
ENGL-1302-21075	27	$39	$144	$106	$2857
ENGL-2332-41624	30	$37	$91	$53	$1601
GOVT-2305-21412	30	$50	$117	$67	$2000
HIST-1302-10101	13	$54	$124	$70	$915
HIST-1302-10102	17	$54	$124	$70	$1196
ITSW-1407-86010	28	$80	$299	$219	$6129
MATH-1314-41101	36	$94	$174	$80	$2880
MUSI-1306-40535	24	$51	$118	$67	$1598
PSYC-2301-41101	66	$54	$110	$56	$3691
SPCH-1311-41010	22	$66	$144	$78	$1711
SPCH-1311-86101	26	$66	$144	$78	$2022
Totals	617	$1614	$3704	$2092	$56,149
Notes:		$70	$161	$91	$91
[a]Approved by the Board of Trustees		Average	Average	Average	Average
[b]Includes Sale Tax					
[c]Amounts are Rounded					

Table 9.3 Associate degree cost of tuition and course material comparison

Description	Courses necessary	Average retail textbook cost	Total book cost estimate	Tution cost	Estimated cost of tution & course	Percentage
Comparison of associate degree cost using Pilot text book average and exiting course material average						
Present situation at TCC						
Associate Degree	20	$161	$3220		$3220	**46%**
Tution ($64/H)				$3840	$3840	**54%**
				$7060	**100%**	
Based on the Pilot of 23 sections						
Associate Degree	20	$70	$1400		$1400	**27%**
Tution ($64/H)				$3840	$3840	**73%**
					$5240	**100%**
Difference between actual situation & inclusive access					**$1820**	**26%**

speech. It is a cadre of different courses. In addition, as you can see from the charts (Table 9.2), the larger savings were generally in the math and science as well as information technology disciplines. Overall, cost savings to students in Spring 2018 came to $56,149.

The team posed the question of "How much could a student save on an associate degree, which is a principal unit of measure of college completion?" To approach the inquiry, we could use the average textbook cost of $161. Average inclusive access course material cost $70, and normally it takes 60 credit hours to obtain an associate degree. We calculated tuition cost constant at $64 per semester credit hour for TCC in-county tuition rate—Table 9.2. The economic benefit for an associate degree can be seen in Table 9.3.

The use of inclusive access class material would provide a 25% overall savings and specifically $1820 for average associate degree.

After the Spring 2018 pilot, we realized that having variable prices for every course was not scalable. Thus, we decided we needed to rationalize the pricing into a set of groups or tiers. We established tier pricing for logical combinations of disciplines. We established six (6) pricing tiers to cover all potential courses in the program. This helped to simplify the pricing structure and reduced the time needed to price each set of course materials separately. As we continued the pilot, in Fall 2018 we experienced a growth of 380% achieving 88 sections, which included approximately 2640 students. In the Spring 2019 term, we doubled enrolment to 190 sections, which includes about 3500 students. By Spring 2019, we had an average savings per class of around $56.

TCC Plus Whole Process: In Detail

The following describes the normal steps followed in preparing the TCC for an inclusive access selection process for each semester. The steps are as follows:

1. Academic Affairs works with the faculty curriculum team to determine common learning materials by discipline (CLM).
2. Publisher pricing on the selected textbooks are assembled into a spreadsheet.
3. We use a 1-month back-date method to create TCC Plus deadlines.
4. Build the Google Form for the current semester (i.e., Spring 2020 faculty opt-in).
5. E-mail completed Google Link to various institutional key stakeholders to distribute to interested faculty members.
6. Develop GoogleDoc Spreadsheet site for accumulation of all needed information. This is a dynamic (subject change) spreadsheet. This data will be used in several other phases.
7. Additional negotiation is completed with the publishers in terms of tier pricing of the desired TCC Plus textbooks selected by faculty from the list of CLMs.
8. Gather the full course name section numbers for courses that are designated TCC Plus. This is a large collaboration with each of the 6 campuses, as each respective individual campus has section building authority and responsibilities.
9. Assemble Master Spreadsheet for business services, purchasing, and section support.
10. Deliver all needed information to business services to modify course sections to include I/A fee.
11. Registrar/section support to add TCC Plus link and fee to section notes that students see.
12. Business services to link fees to AR codes. This is needed for accounting reconciliation.
13. Deliver all information to bookstore to be incorporated into Bookstore system.
14. Bookstore to build out their system.
15. Implement all previous steps prior to when courses go live for student view.
16. Follow-up with advisors.
17. Create adjustments to our bookstore reconciliation report to give a head count for each course.
18. Students register for the courses using our standard systems and processes.

In order to meet important deadlines, the TCC Plus team developed a "back-dating" model from the date that courses go live for student registration.

More on the Faculty Process

Faculty members have full autonomy in the decision to participate or not participate in the inclusive access initiative. An inclusive access section has the following parameters: (1) the course materials will be delivered digitally and provided through the Blackboard Learning Management System (LMS) directly to the student account; (2) the student will have a better price, with the cost included in the tuition; and (3) the student can opt out, but they will have to secure the course material on their own. We discovered in our research that when faculty are given the full autonomy in course material selection process for their class, they exhibit the most successful results. Therefore, TCC adopted this as their operating model. It is at the core of what we do and has made us successful thus far. The course material fee is added to the student's tuition cost at registration. As per the federal regulations, students must be given the option to opt out via our system [1]. Opt out means that they would secure the course material on their own. We also developed an opt-in process if a student decides, within a reasonable time, they want to pay the course material fee.

How Does It Work?

What is unique about TCC Plus is that 100% of the students have digital access to the textbook on day one. This has implications for the faculty member which has changed the way they approach pedagogy for the first week of classes. Whereas many faculty used to delay a week before getting into the bulk curriculum, they can now start immediately. When 100% of our students have access to the textbook on day one, then the course pedagogy can begin immediately.

For those who need a tangible copy of the textbook in hand, a low-cost print option is also available from the TCC Bookstore. Once they purchase the digital textbook, there is a process for obtaining a digital print option as well if desired.

Pilot Student Data

Some additional statistics related to the Spring semester were as follows: Unfortunately, we had one class that did not comply. We believe that 6:30 a.m. offering was one of the reasons why the class did not comply. Even though when we talked about administrative support, we still acknowledge the importance of academics at the campus level to make decisions about which classes are going to comply and which ones do not. The campuses have control of how to manage and build sections.
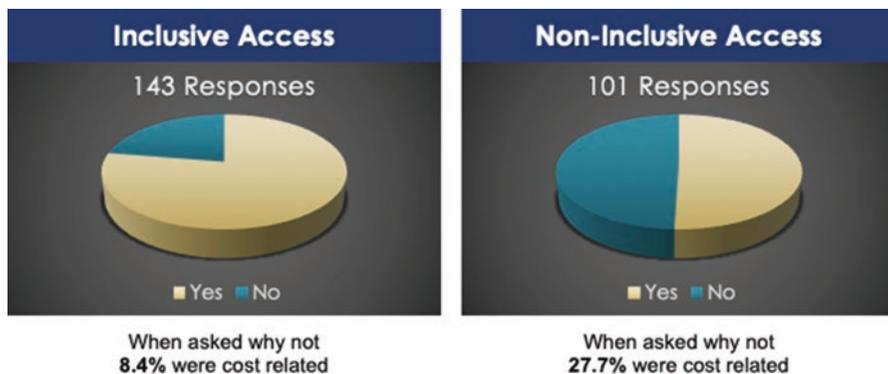
Inclusive Access
143 Responses
■ Yes ■ No
When asked why not
8.4% were cost related

Non-Inclusive Access
101 Responses
■ Yes ■ No
When asked why not
27.7% were cost related

Fig. 9.3 Textbooks among student respondents—Spring 2018 pilot

In the Spring we were trying to ensure that faculty were simultaneously teaching an inclusive access class and a noninclusive access course and would therefore be able to make a true comparison. Our population consisted of 617 students in the inclusive access sections and 528 in the noninclusive access; also at the bottom of Fig. 9.3, we can see that 11 out of the 617 students decided to opt out. There was one example of a student who decided to opt back in because he or she may have determined that one cannot find the textbook at a low cost or below market rate price outside of the program. Eleven (11) out of 617 is well below our expected national average of about 5% of students who opt out of the program. With 95% of students having and keeping the text throughout the semester, it has the potential to move the needle in a manner better than we could have imagined.

Some of the preliminary statistics of inclusive access classes versus the noninclusive access classes were not expected. When inclusive access students were asked if they had a textbook on day one, we found an unexpected reply. All students had the course material available on day one; however, not all students were aware that they had access to the text. We determined that going forward, we would need to determine how to properly educate the faculty and students on how to access their particular digital content resources.

Results of the Solution

Student Benefits

The precept of student benefit became the central theme and very important to all members of the task force. This idea is what drove each member of this task force which we had the honor of cochairing. Each member of the task force was focused on the benefits to the student. Students are provided a more affordable option of the textbook—generally, a much better cost than a traditional hard copy textbook. It

also is covered by student's financial aid. They have digital access to digital e-text on day one via the LMS. TCC uses Blackboard to give the student access to the textbook on day one. A reasonable cost print option is available for those who wish to have a physical book costing approximately $20−$30 plus tax. No access code is required, which previously caused many accessibility concerns. The fact that the textbook is already integrated with no access codes made whole departments sign up on a voluntary basis as a result.

Faculty Benefits

It is an incredible benefit for a faculty to know that the entire class has the course materials on day one. This changes the way faculty think about teaching and how we can optimize initial learning with students. The second salient point is that faculty know that all students will actually have the course material. We probably are not measuring these statistics as we know it relates to student success. We should perhaps consider the excuses we hear at the beginning of each semester but will no longer have any validity—"I still do not have my book professor can you please slow your pace?" Course materials on day one means we can begin working on assignments immediately.

Another important tool available to faculty is the ability to know how the students are using the digital book; a myriad of data on the actual usage are now available to the faculty—how many pages have been read, how many problems have been performed, where the student is getting stuck, etc. Future exploring should look at faculty benefits in terms of data now available about students' access, usage, and time spent in the course material. This data can have incredible effects on how we teach our students.

Faculty can make assignments immediately available to everyone because all students have access on day one including access to the ancillary materials. That is, we have yet to explore some of the technical benefits of this particular model.

Initial Data Points and Conclusions

TCC initial data points are hopeful. In Spring 2019, TCC Plus had $56.05 in average savings per class over current common learning material prices. The program has book options for 75% of the courses at TCC. This program acknowledges that faculty training and support are vital to sustain success. Further, TCC Plus is a program of voluntary participation of the faculty members. Our program has achieved a 98% opt-in rate; that is, 98% of the students in the program keep their purchased course materials from day one through the date of census. We feel that as the TCC Plus program grows, we will have much more measurable impact on student success.

Appendices

Appendix A

TCC plus − Initial cross functional team			
Area	Individual	Team responsibility	Job function -TCC
Leadership	Dr. Mark McClendon	Co-chair	CFO − Vice Chancellor Finance
	Dr. Tyson McMillan	Co-chair	JCC Chair Emeritus, Professor
Finance/Auxiliary Services	Mike Herndon	Purchasing /Team	Purchasing Manager
	Ray Allison	Administrative	Auxiliary Contract Specialist
	Lisa Waller	Coordination	Analyst – Administration Support
Campus Presidents Representative	Dr. Bill Coppola	Connection to Presidents	South East Campus President
Financial Aid	Samantha Stalnaker	Financial Aid Representative	Assistant Director Financial Aid
Dean Representative	Linda Wright	Academic Deans	NE Campus
	Dr. Solomon Cross,		TCC Connect
Business Services	Sherry Heffner	Business Services	Manager District Services
JCC/Faculty Representative	Dr. Tyson McMillan	JK/Faculty Representative	Professor
	Mr. Steve Smiley		Instructor, JCC Chair -Elect
	Dr. Shereah Taylor		Professor
Academic Affairs	Dr. Nancy Curé	Academic Affairs	Assoc Vice Chancellor
			Academic Affairs
Diversity	Andrew Duffield	Diversity	Chief Diversity Officer
IT/LMS	Vicki Hutto	IT/LMS Representative	Director of Application Development
Institutional Intelligence & Research	Dr. Rosemary Reynolds	Institutional Intelligence & Research	Dir. of Institutional Research
	Dr. Holly Stovall		Director of Research
CIE Representative	Dr. Robert Munoz	CIE Representative	Vice President of Community & Industry Education TR Campus
Corporate Solutions	Jennifer Hawkins	Corporate Solutions	Dir. Corporate Services
Student Advising	Sharon Moore	Student Advising	Assistant Director of Student Learning Materials
Communications	Mr. Reginald Gates	Communications	Vice Chancellor Communications & External Affairs

Appendix B

Faculty − Early adopters				
No.	First name	Last name	Campus	Teaching area
1	Penny	Cypert	NE	Information Technology/Computer Science
2	Charles	Desassure	SE	Information Technology/Computer Science
3	Regina	Cannon	SE	Business
4	Randy	Jackson	CN	Business Administration − Management
5	Tim	Park	CN	Business
6	Shelli	Hull	SO	Chemistry
7	Mark	Eley	TR	Chemistry
8	Steve	Smiley	NW	Information Technology/Computer Science
9	Tyson	McMillan	TR	Information Technology/Computer Science
10	Nosratallah	Nezafati	SE	Information Technology/Computer Science
11	Shereah	Taylor	SO	Education
12	Kirk	Adams	SE	English
13	Stacy	Stuewe	NE	English
14	Kathy	Quesenbury	SE	English
15	Leigh-Anne	Regenold	NE	Government
16	Jennifer	Heth	SO	History
17	Lee (Noble)	Snaples	SO	History
18	Shahla	Durany	SO	Information Technology/Computer Science
19	Priti	Patel	SE	Mathematics
20	Greg	Dewhirst	SE	Music
21	Des	Robinson	SE	Psychology
22	Stephen	Brown	SE	Speech
23	Cristina	Sullivan	CN	Speech

Appendix C

District administration approval process	
No.	Description
1.	ACTs select Textbook options
2.	Purchasing get pricing and ISBNs from publishers
3.	Bookstore manage textbook listings and E-book details with publishers
4.	Faculty Opt-in to select desired TCC Plus text from list of CLMs
5.	Campuses (VPAAs/Deans/Chairs) look at opt-in list and build sections
6.	Business Services attach fee information
7.	Section builders attached notes and custom price details and click TCC Plus designation checkbox.
8.	Students register for TCC Plus classes as part of the wider system.

References

1. Government Publishing Office. (2019). *eCFR – Code of Federal Regulations*. Retrieved from: https://www.ecfr.gov/cgi-bin/text-idx?SID=f26563f69fbe76d894166903c246601c&mc=true &node=se34.3.668_1164&rgn=div8
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