UNIT 07: NTFS | EXERCISE 03

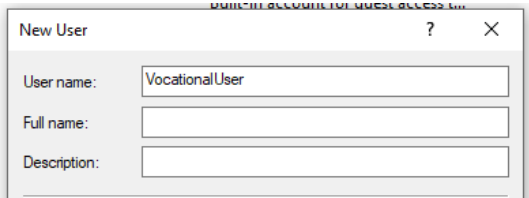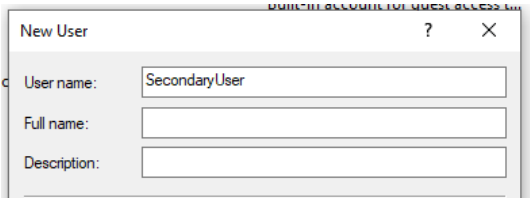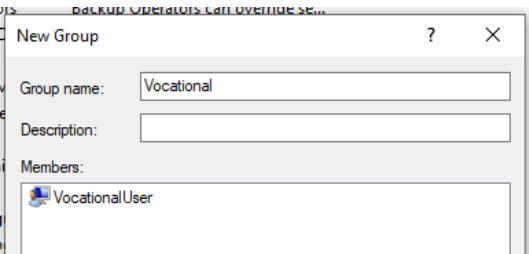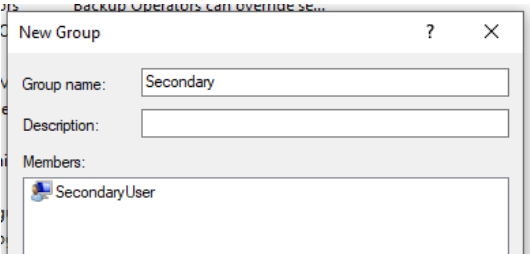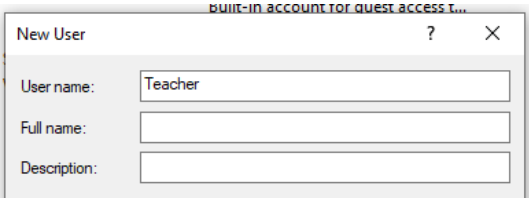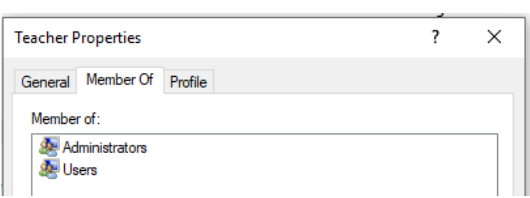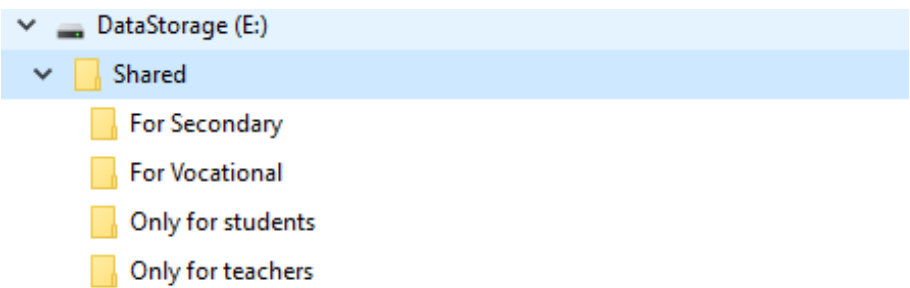We have a PC with Windows 10 that consists of two groups: Vocational and Secondary. The user "VocationalUser" will belong to "Vocational" and the user "SecondaryUser" will belong to "Secondary". There is also a user called Teacher which belongs to the group Administrators.

Complete all the exercises considering two scenarios: disabling inheritance and with inheritance.
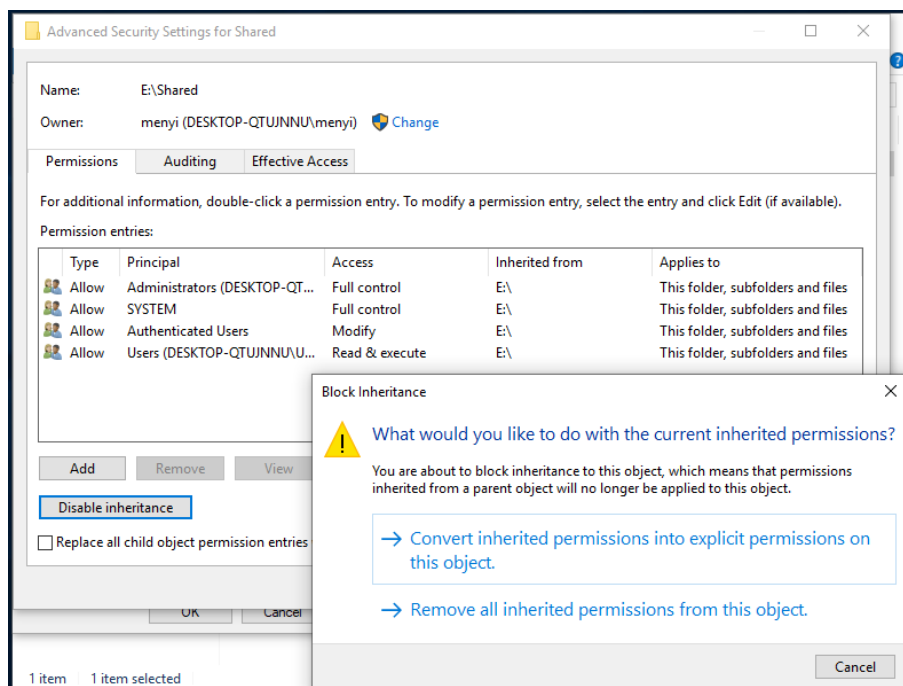
A) Create all the users and groups mentioned above

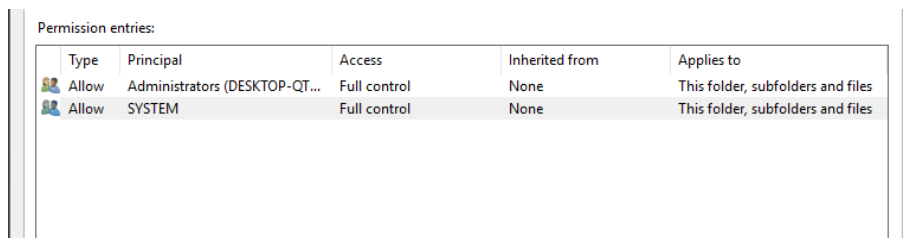B) Create the following directory tree with the permissions below.

Permissions

1. The directory known as "Shared" is able to be accessed by two users: "VocationalUser" and "SecondaryUser", but they cannot delete or create subfolders and files. The user Teacher has Full Control over this directory.

2. The directory "For secondary" cannot be accessed by the group "Vocational", while the group "Secondary" is able to do everything except change permissions.

3. The directory "For vocational" cannot be accessed by the group "Secondary", while the group "Vocational" is able to do everything except delete this folder and change permissions.

4. The directory "Only for students" can be accessed exclusively by all students regardless of the group. They will able to create files within this folder

5. The directory "Only for teachers" can be accessed exclusively by all teachers and only with read and execute permissions.

Step 01 | Create all the users and groups	
From Computer Management > Users and Groups	
Create VocationalUser	Create SecondaryUser
Create Vocational group Add VocationalUser	Create Secondary group Add SecondaryUser
Create Teacher user	Add Teacher user to Administrators group

Step 02 | Create the directory tree

Step 03 | Assign Permissions with disabling inheritance

Shared folder > Propierties > Security> Advanced

Disable inheritance then select Convert inherited permissions into explicit permission in this object

First, Remove Permissions entries for Authenticated Users and Users

Now, Add Permissions for VocationalUser and SecondaryUser users

so, they can only access but they can´t delete or create subfolder or files

Teacher user already belongs to Administrators group so

its permissions don't need to be modify in order to have Full Control

All permissions entries are set Shared folder as follow

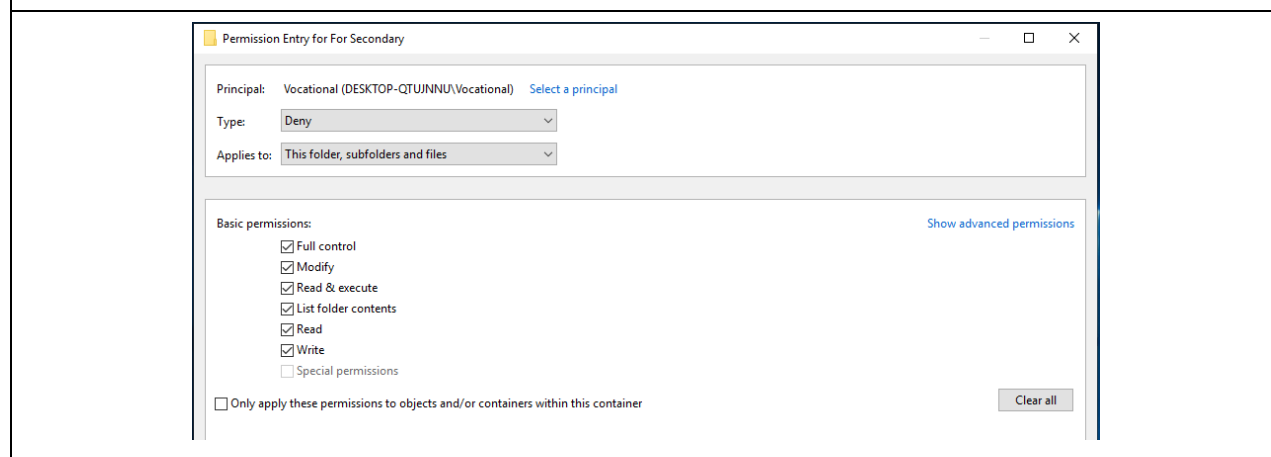**For Secondary > Propierties > Security> Advanced**

Disable inheritance then select Convert inherited permissions into explicit permission in this object.

Because this folder is inside of Shared folder, Authenticated Users and Users are already removed
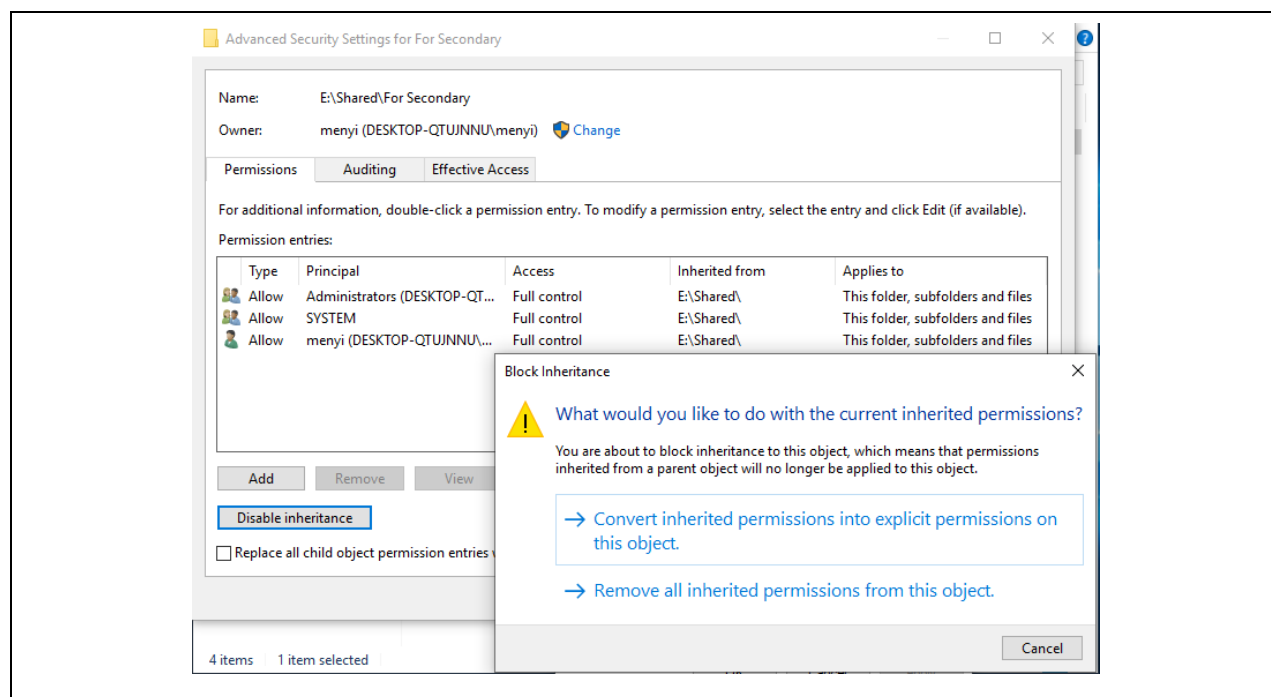
Deny permissions to access this folder to Vocational group

Allow permissions to Secondary group so they can do everything but change permissions
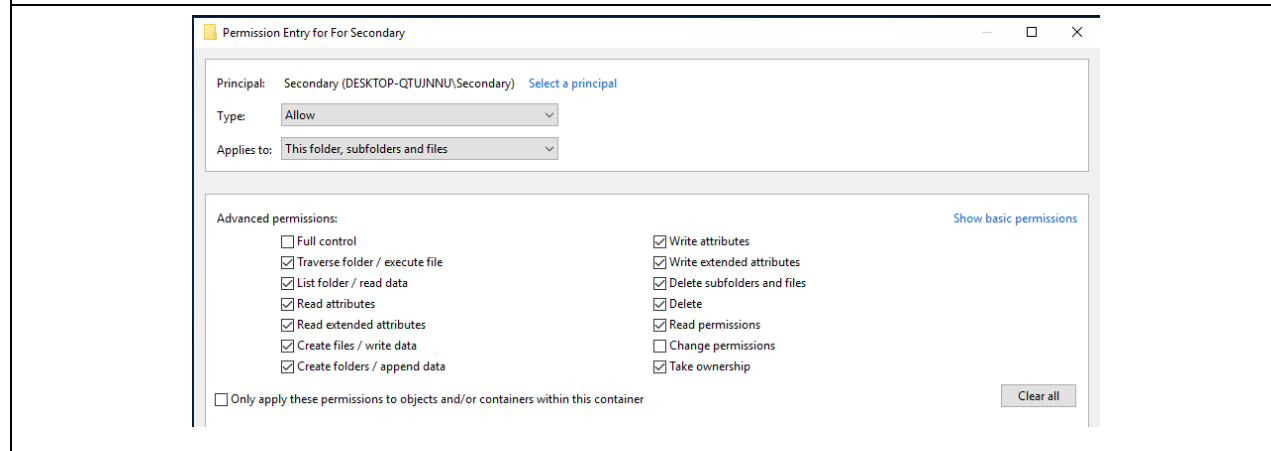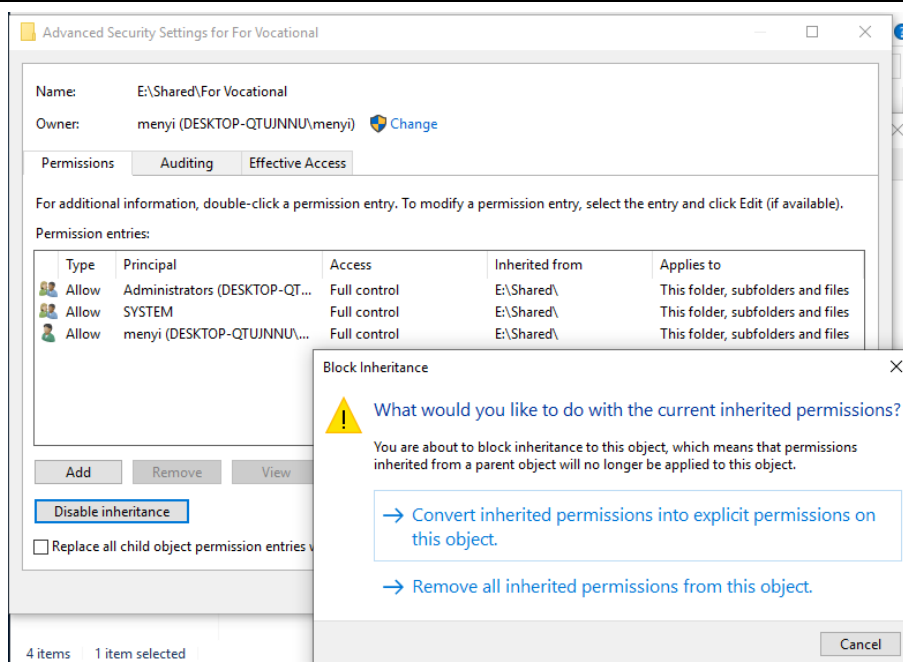

All permissions entries are set For secondary folder as follow

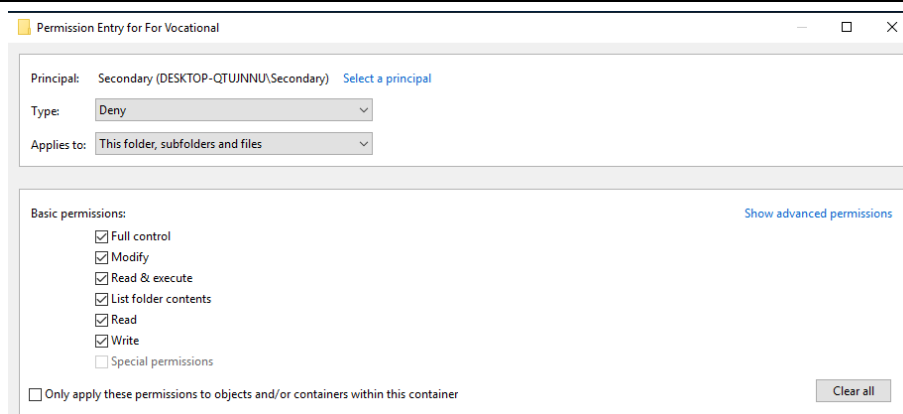|	Type	Principal	Access	Inherited from	Applies to
	Deny	Vocational (DESKTOP-QTUJN...	Full control	None	This folder, subfolders and files
	Allow	Administrators (DESKTOP-QT...	Full control	None	This folder, subfolders and files
	Allow	SYSTEM	Full control	None	This folder, subfolders and files
	Allow	menyi (DESKTOP-QTUJNNU\...	Full control	None	This folder, subfolders and files
	Allow	Secondary (DESKTOP-QTUJN...	Special	None	This folder, subfolders and files

For Vocational > Propierties > Security> Advanced

Disable inheritance then select Convert inherited permissions into explicit permission in this object.
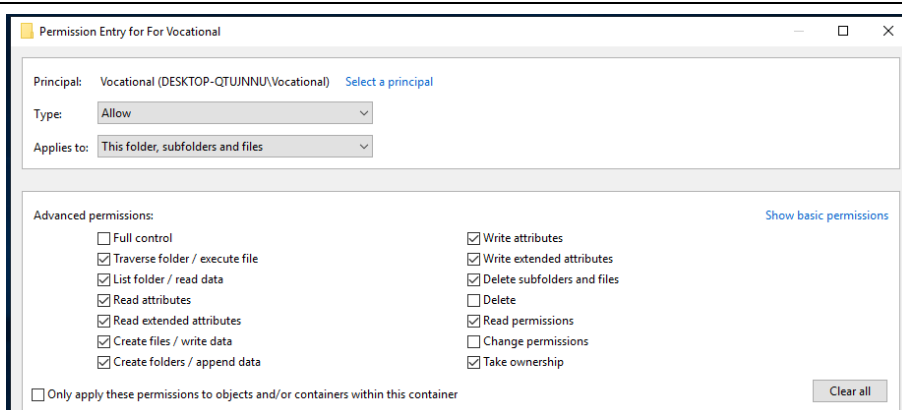
Also, Authenticated Users and Users permissions are already removed

Advanced Security Settings for For Vocational

Name: E:\Shared\For Vocational

Owner: menyi (DESKTOP-QTUJNNU\menyi) 🛡 Change

Permissions | Auditing | Effective Access

For additional information, double-click a permission entry. To modify a permission entry, select the entry and click Edit (if available).

Permission entries:

	Type	Principal	Access	Inherited from	Applies to
	Allow	Administrators (DESKTOP-QT...	Full control	E:\Shared\	This folder, subfolders and files
	Allow	SYSTEM	Full control	E:\Shared\	This folder, subfolders and files
	Allow	menyi (DESKTOP-QTUJNNU\...	Full control	E:\Shared\	This folder, subfolders and files

Add   Remove   View

Disable inheritance

☐ Replace all child object permission entries

Block Inheritance ✕

⚠ What would you like to do with the current inherited permissions?

You are about to block inheritance to this object, which means that permissions inherited from a parent object will no longer be applied to this object.

→ Convert inherited permissions into explicit permissions on this object.

→ Remove all inherited permissions from this object.

Cancel

4 items   1 item selected

Deny permissions to access this folder to Secondary group

Permission Entry for For Vocational

Principal: Secondary (DESKTOP-QTUJNNU\Secondary)   Select a principal

Type: Deny

Applies to: This folder, subfolders and files

Basic permissions: Show advanced permissions

☑ Full control
☑ Modify
☑ Read & execute
☑ List folder contents
☑ Read
☑ Write
☐ Special permissions

☐ Only apply these permissions to objects and/or containers within this container   Clear all

Allow permissions to Vocational group so they can do everything

but delete this folder and change permissions

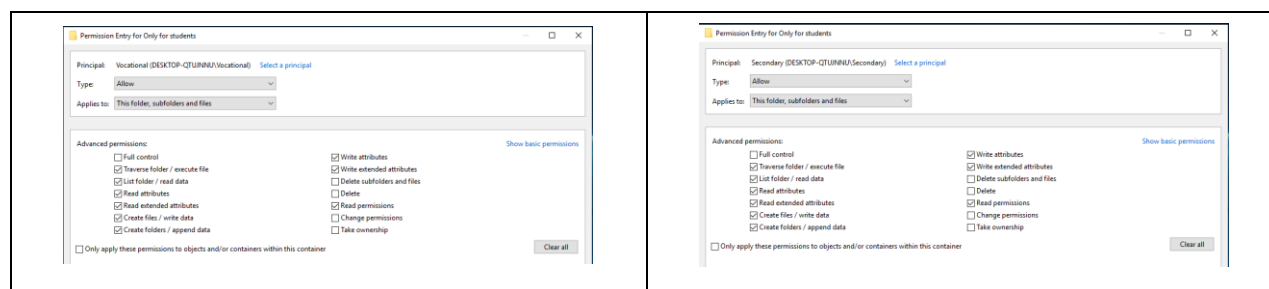All permissions entries are set For vocational folder as follow

Only for students > Propierties > Security> Advanced

Disable inheritance then select Convert inherited permissions into explicit permission in this object.

Also, Authenticated Users and Users permissions are already removed

Allow permissions to Vocational and Secondary groups so they can access and create files

Since inheritance is disable, access will be denied automatically denied to others users

All permissions entries are set Only for students folder as follow

Only for teachers > Propierties > Security> Advanced

Disable inheritance then select Convert inherited permissions into explicit permission in this object.

Also, Authenticated Users and Users permissions are already removed

For this folder would be better to have a group called Teachers and apply permissions to it but

there in only one teacher user so permissions are applied directly to this user.

Although, Teacher user belongs to Administrators group.
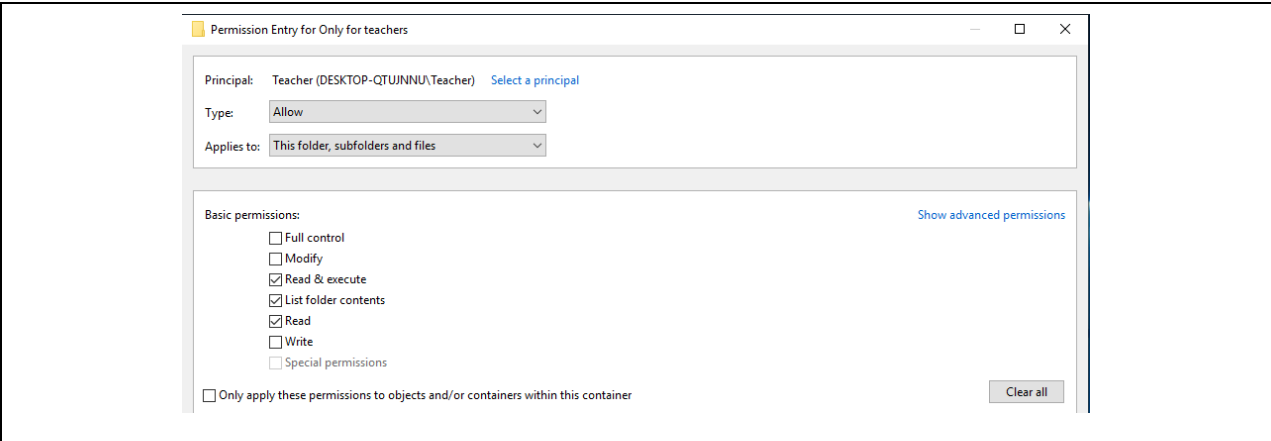
It can be accessed only for teachers with read and execute permissions.

All permissions entries are set Only for teachers folder as follow
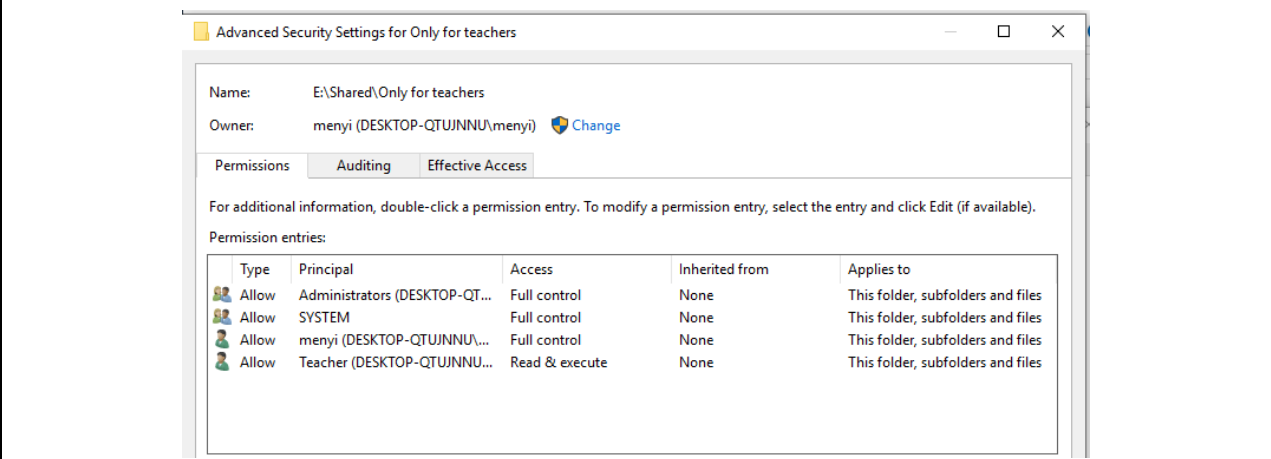
Step 04 | Check Permissions with disabling inheritance

VocationalUser member of Vocational group permissions

Shared folder access permission only

Permission denied to access	All permissions granted but Change permissions
For Secondary folder	For Vocational folder
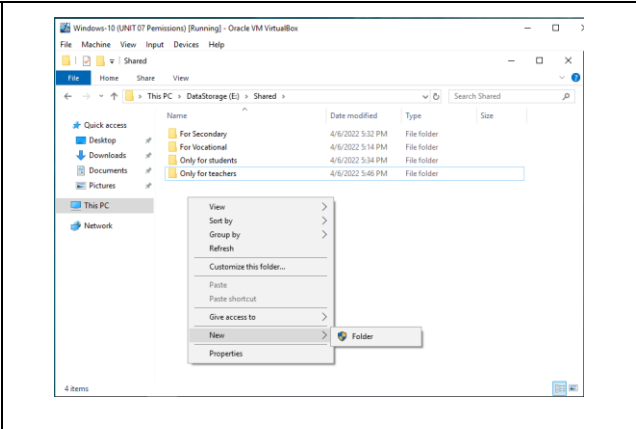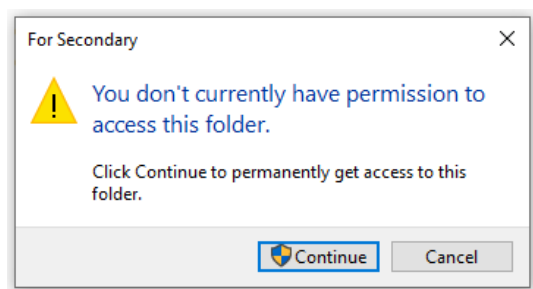
Permissions restricted Only for students folder	Access denied Only for teachers folder
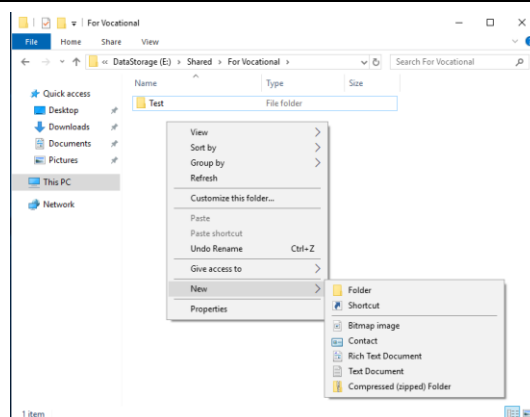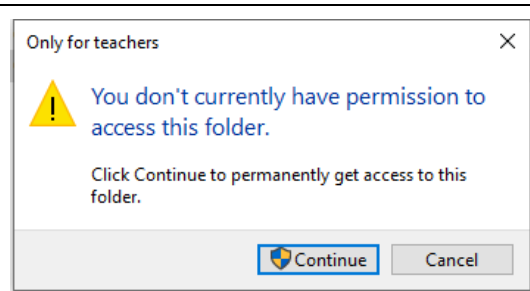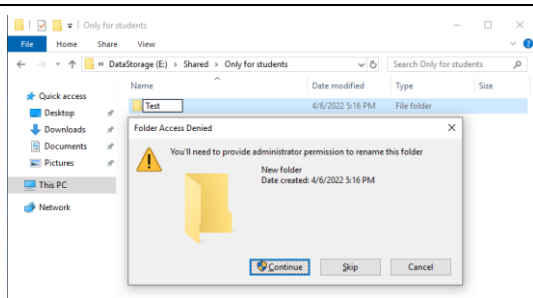
SecondaryUser member of Secondary group permissions

Shared folder access permission only
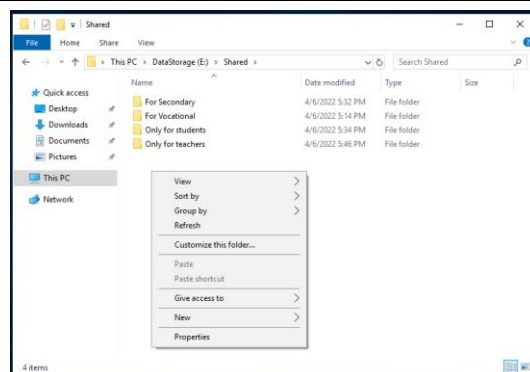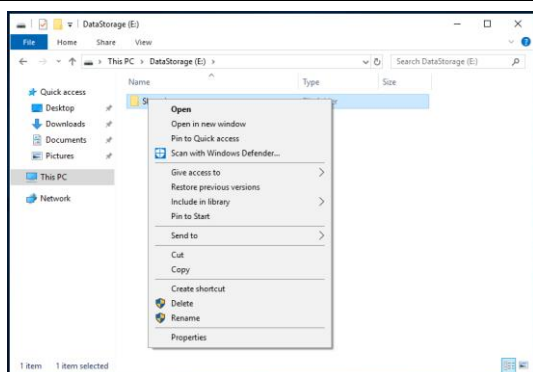
All permissions granted but Change permissions For Secondary folder	Permission denied to access For Vocational folder
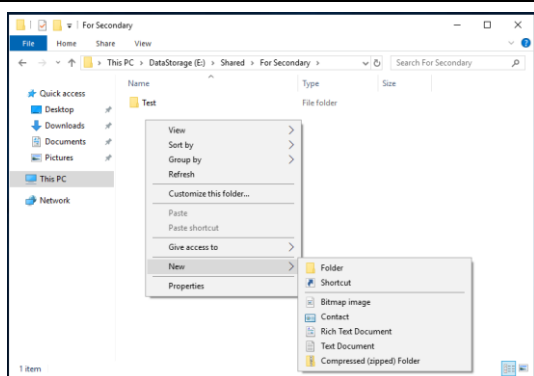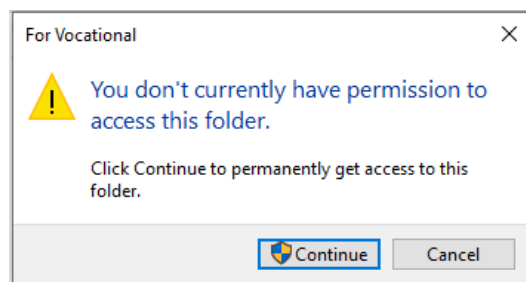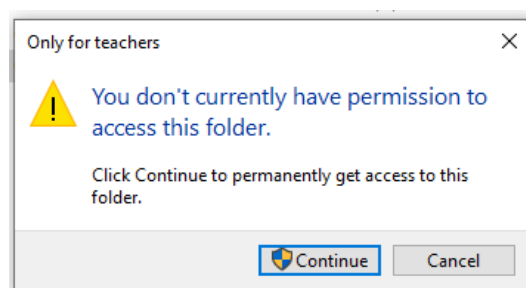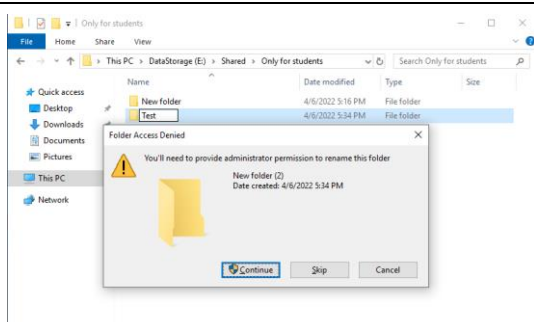
Permissions restricted Only for students folder	Access denied Only for teachers folder
Teacher	
Shared folder permission as Administrator	
Permission denied to access For Secondary folder except as Administrator	Permission denied to access For Vocational folder except as Administrator
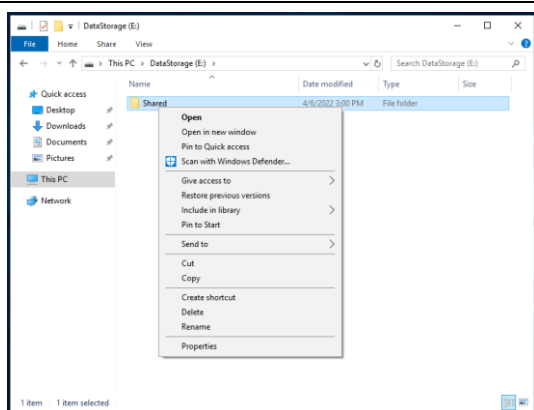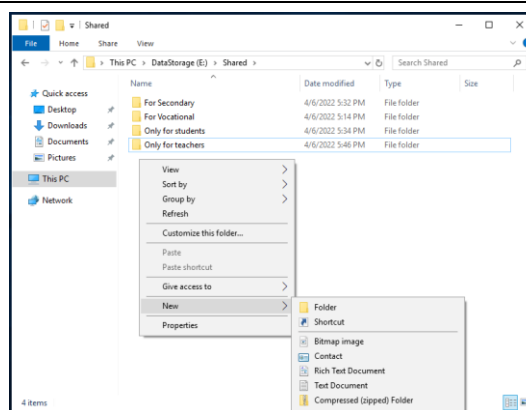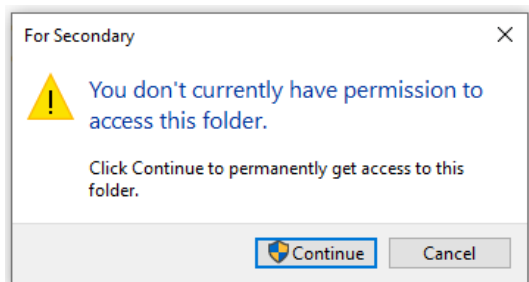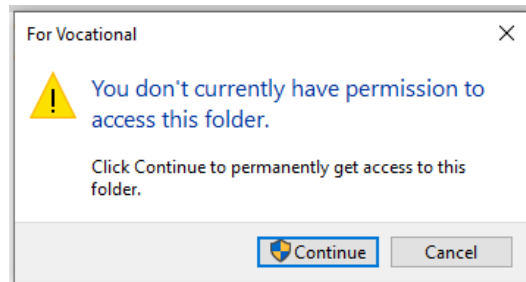
Permission denied to access Only for students folder except as Administrator	Access restricted only read and execute permission to Teachers folder
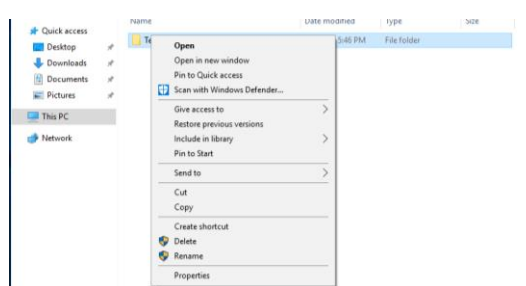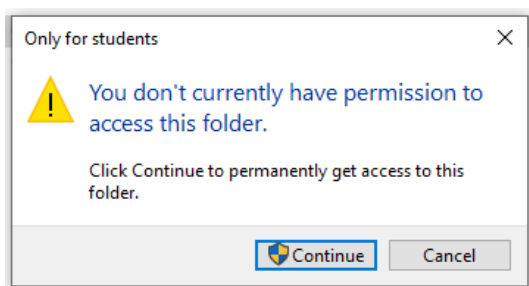
Step 05 | Assign Permissions with inheritance

Shared folder > Propierties > Security> Advanced

Due to inheritance permissions can´t be remove or edit.

Add permissions to Allow / Deny since the most restricted permissions are applied
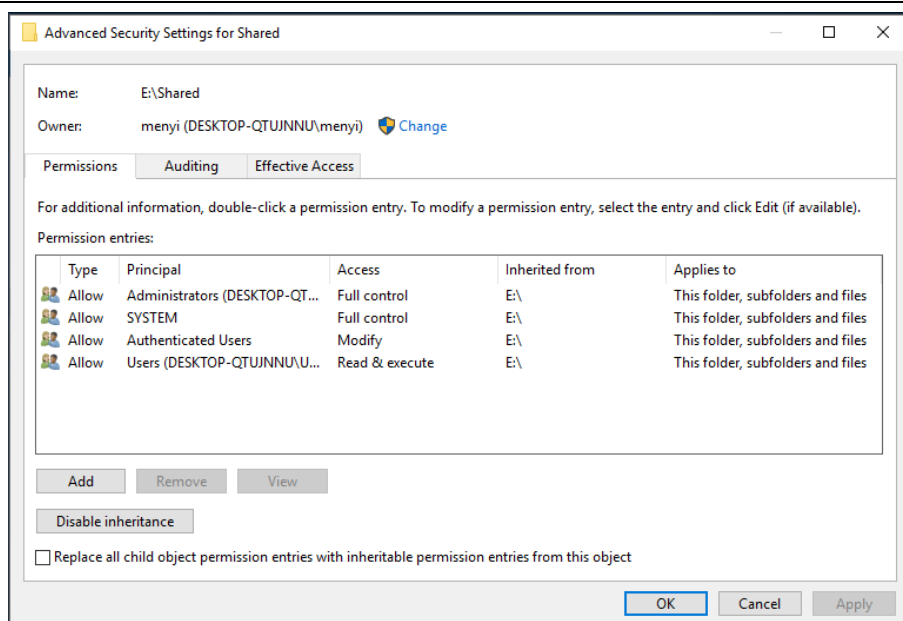
Add permissions to Deny for Users and Authenticated Users so they can only access to this folder
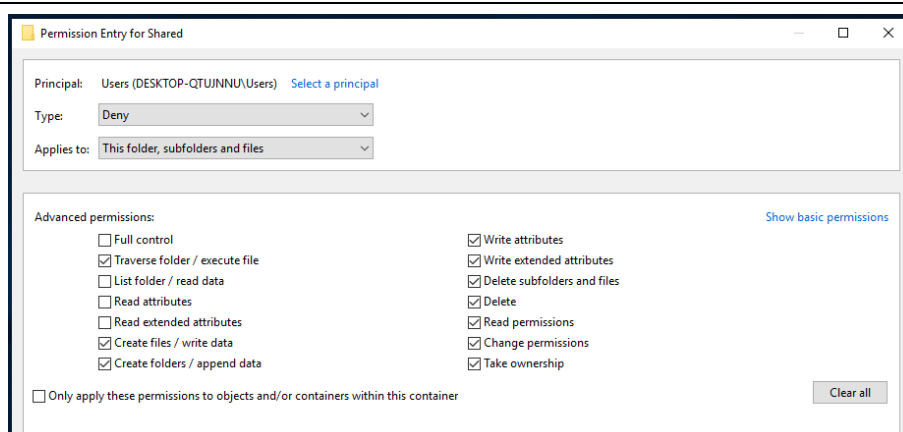
Add permission to Allow for Vocational and Secondary groups

so they can access to Share folder but can´t delete or create subfolder or files

All permissions entries are set Shared folder as follow

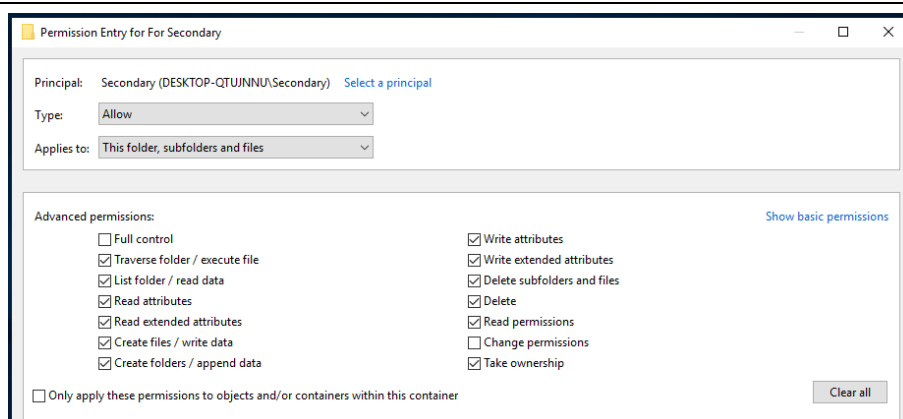**For Secondary folder > Propierties > Security> Advanced**

Permission For Secondary folder are also inheritance from Shared folder

Add permission to Deny access for For Secondary folder to Vocational group as follow

Add permission to Allow everything but Change permissions

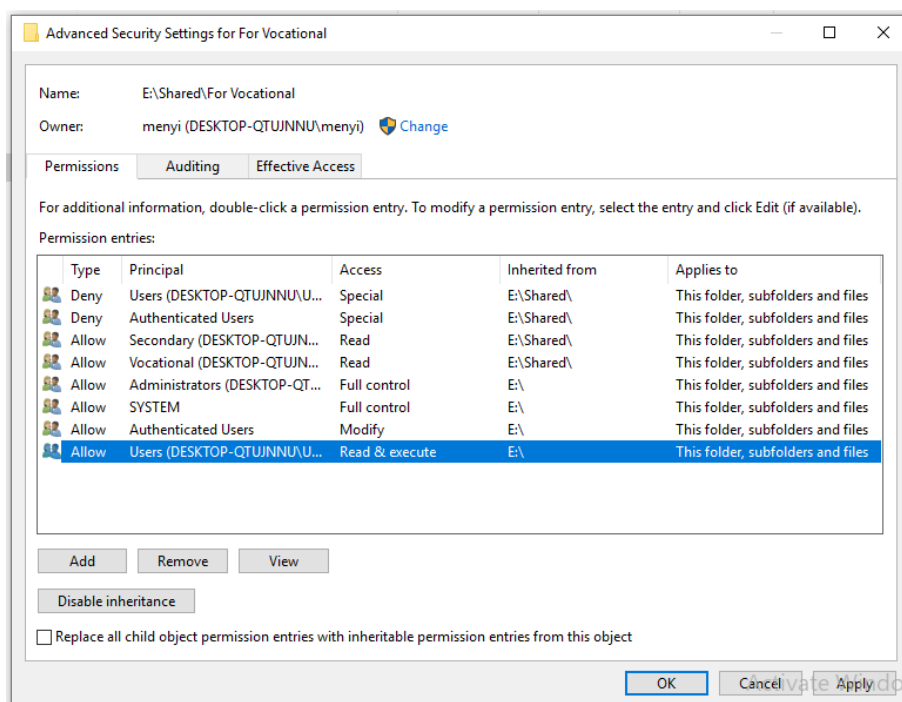For Secondary folder to Vocational group as follow

	All permissions entries are set For secondary folder as follow

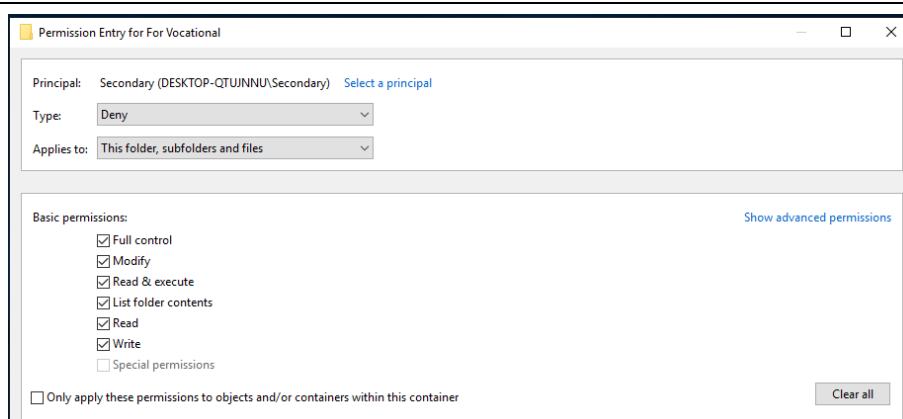
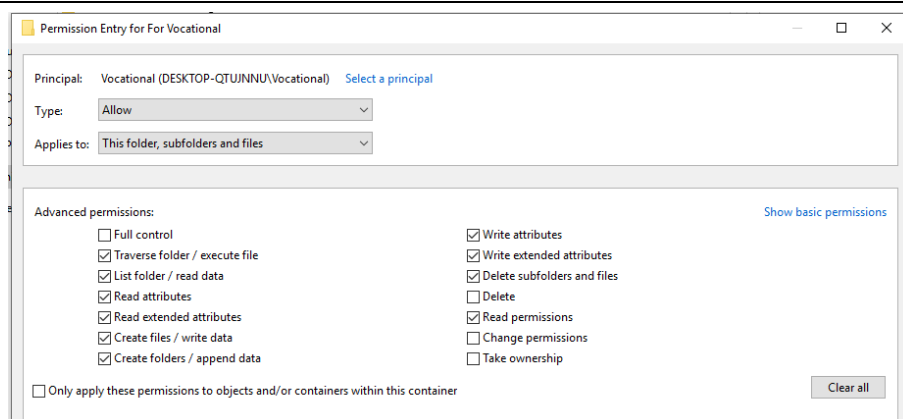|	**Vocational folder > Propierties > Security> Advanced**

Permission For Vocational folder are also inheritance from Shared folder

Add permission to Deny access for For Vocational folder to Secondary group as follow

Add permission to Allow everything but delete this folder and Change permissions
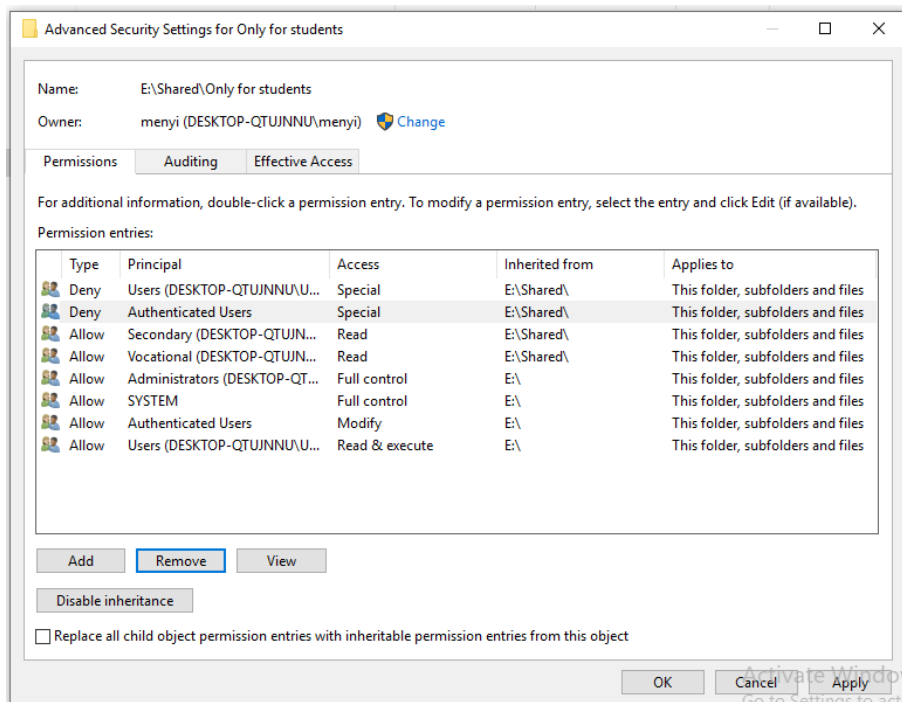
For Vocational folder to Vocational group as follow

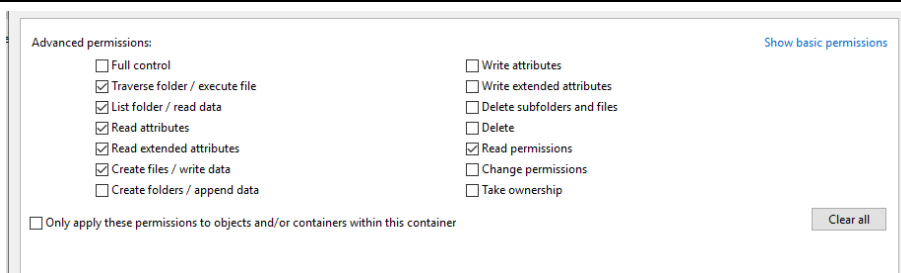All permissions entries are set For vocational folder as follow

For students folder > Propierties > Security> Advanced

Permission For Vocational folder are also inheritance from Shared folder
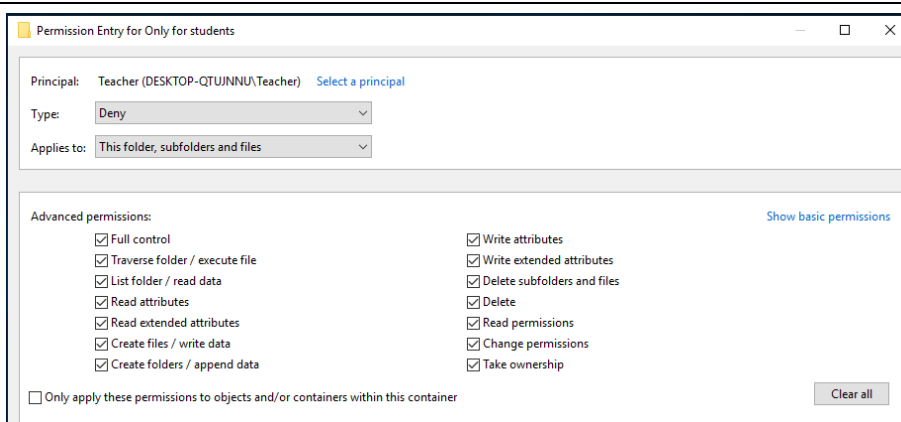
Add permissions to Allow access and create files within Only for students folder

to Vocational and Secondary group as follow

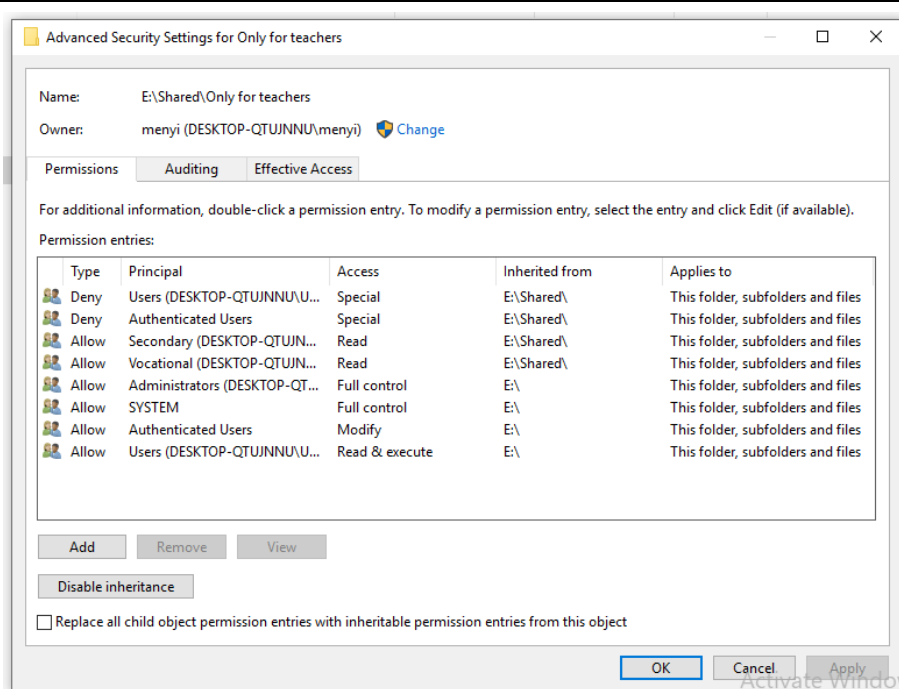Add permission to Deny access to Teacher user (although has Administrator permissions) as follow

All permissions entries are set For only for students folder as follow

Permission entries:

	Type	Principal	Access	Inherited from	Applies to
	Deny	Teacher (DESKTOP-QTUJNNU...	Full control	None	This folder, subfolders and files
	Allow	Secondary (DESKTOP-QTUJN...	Special	None	This folder, subfolders and files
	Allow	Vocational (DESKTOP-QTUJN...	Special	None	This folder, subfolders and files
	Deny	Users (DESKTOP-QTUJNNU\U...	Special	E:\Shared\	This folder, subfolders and files
	Deny	Authenticated Users	Special	E:\Shared\	This folder, subfolders and files
	Allow	Secondary (DESKTOP-QTUJN...	Read	E:\Shared\	This folder, subfolders and files
	Allow	Vocational (DESKTOP-QTUJN...	Read	E:\Shared\	This folder, subfolders and files
	Allow	Administrators (DESKTOP-QT...	Full control	E:\	This folder, subfolders and files
	Allow	SYSTEM	Full control	E:\	This folder, subfolders and files
	Allow	Authenticated Users	Modify	E:\	This folder, subfolders and files
	Allow	Users (DESKTOP-QTUJNNU\U...	Read & execute	E:\	This folder, subfolders and files

Only for teachers folder > Propierties > Security> Advanced

Permissions Only for teachers folder are also inheritance from Shared folder

Advanced Security Settings for Only for teachers   —   □   ×

Name: E:\Shared\Only for teachers

Owner: menyi (DESKTOP-QTUJNNU\menyi)   🛡 Change

Permissions | Auditing | Effective Access

For additional information, double-click a permission entry. To modify a permission entry, select the entry and click Edit (if available).

Permission entries:

	Type	Principal	Access	Inherited from	Applies to
	Deny	Users (DESKTOP-QTUJNNU\U...	Special	E:\Shared\	This folder, subfolders and files
	Deny	Authenticated Users	Special	E:\Shared\	This folder, subfolders and files
	Allow	Secondary (DESKTOP-QTUJN...	Read	E:\Shared\	This folder, subfolders and files
	Allow	Vocational (DESKTOP-QTUJN...	Read	E:\Shared\	This folder, subfolders and files
	Allow	Administrators (DESKTOP-QT...	Full control	E:\	This folder, subfolders and files
	Allow	SYSTEM	Full control	E:\	This folder, subfolders and files
	Allow	Authenticated Users	Modify	E:\	This folder, subfolders and files
	Allow	Users (DESKTOP-QTUJNNU\U...	Read & execute	E:\	This folder, subfolders and files

Add   Remove   View

Disable inheritance

☐ Replace all child object permission entries with inheritable permission entries from this object

OK   Cancel   Apply

Activate Window

Add permissions to Deny access to any users but Teachers

for Only for teachers folder as follow

Add permission to Allow access, read and execute to Teachers users as follow

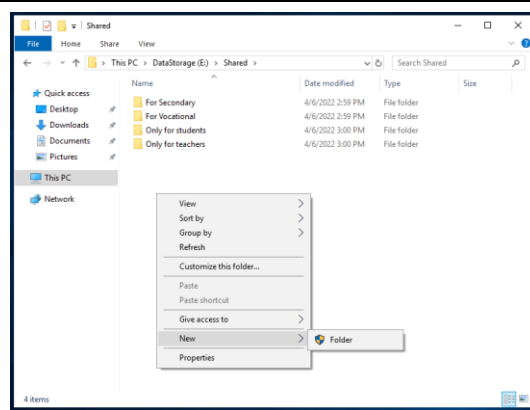All permissions entries are set For only for teachers folder as follow

Step 06 | Check Permissions with inheritance

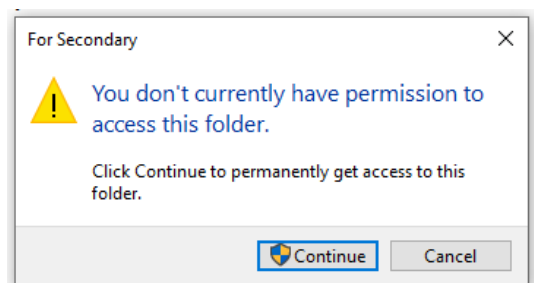**VocationalUser member of Vocational group permissions**
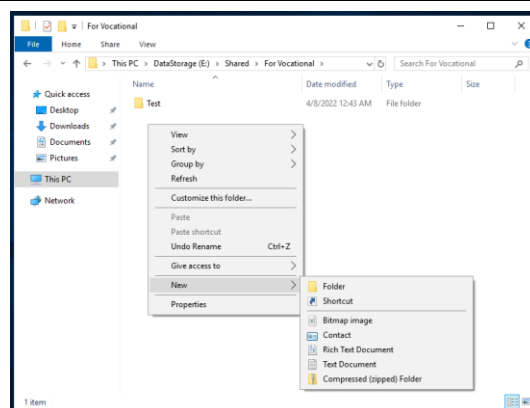
Shared folder access permission only
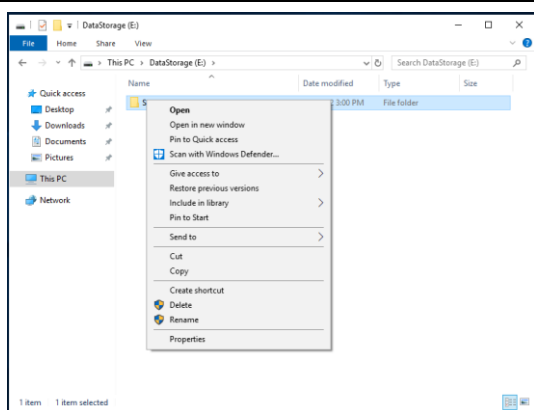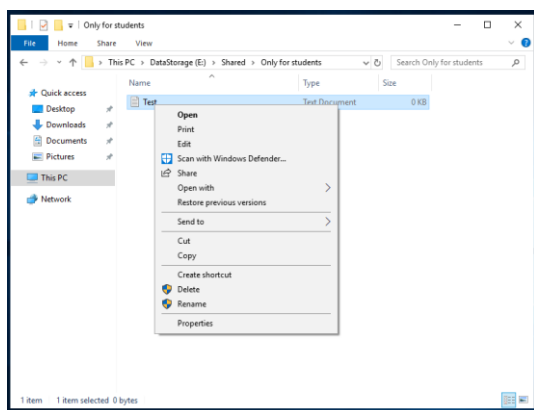
Permission denied to access

For Secondary folder

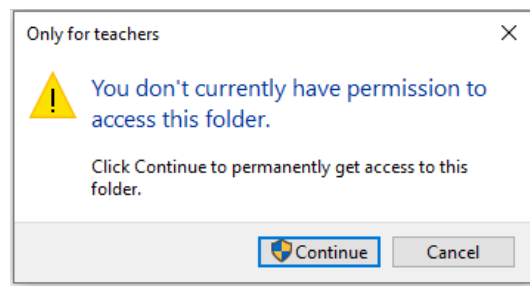All permissions granted but Change permissions

For Vocational folder

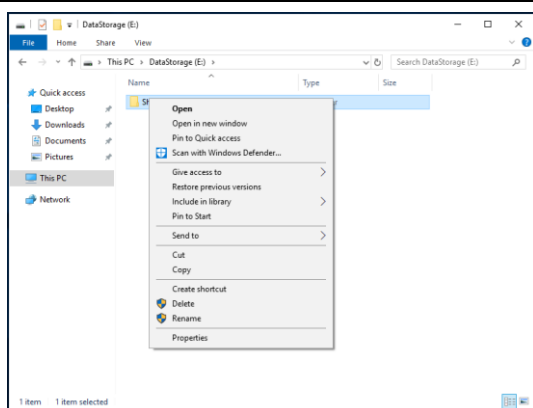Permissions restricted Only for students folder
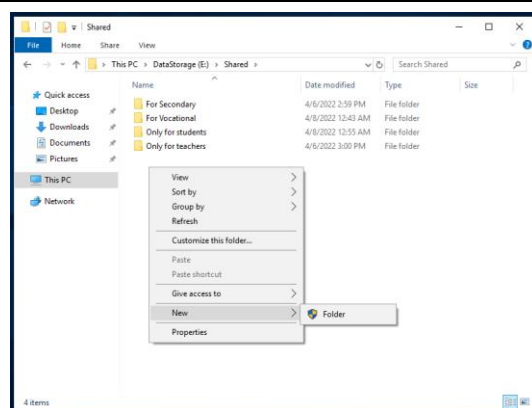

Access denied Only for teachers folder

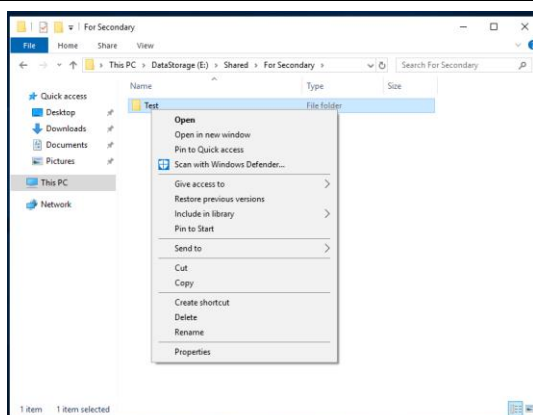**SecondaryUser member of Secondary group permissions**

Shared folder access permission only

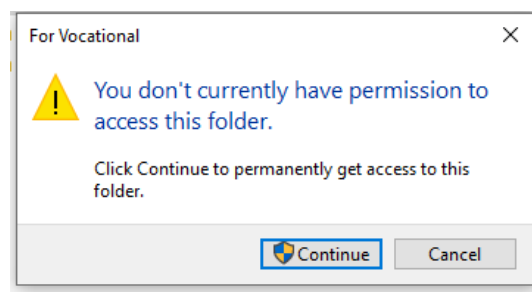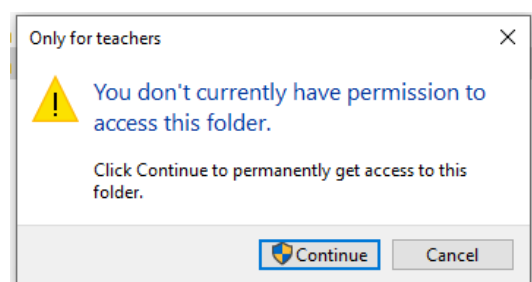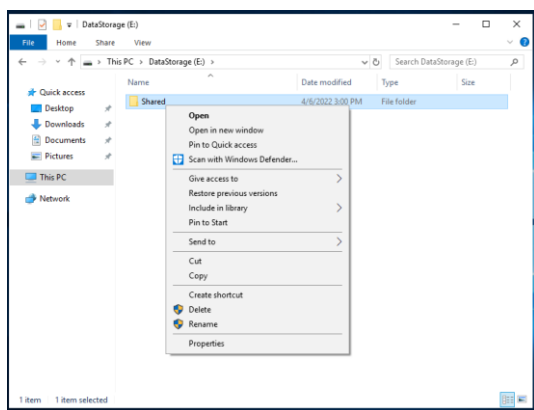| All permissions granted but Change permissions For Vocational folder	Permission denied to access For Secondary folder

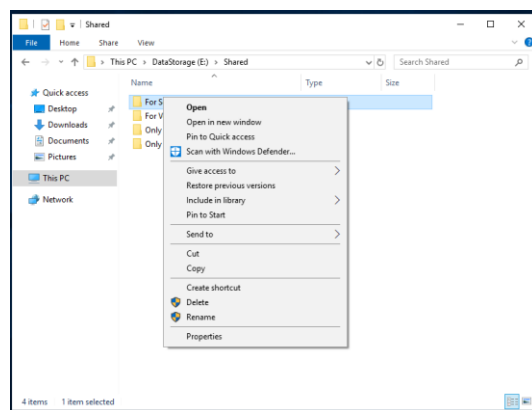| **Only for students folder**	**Only for teachers folder**
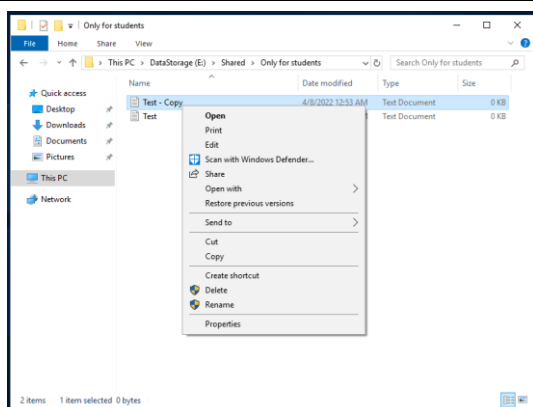
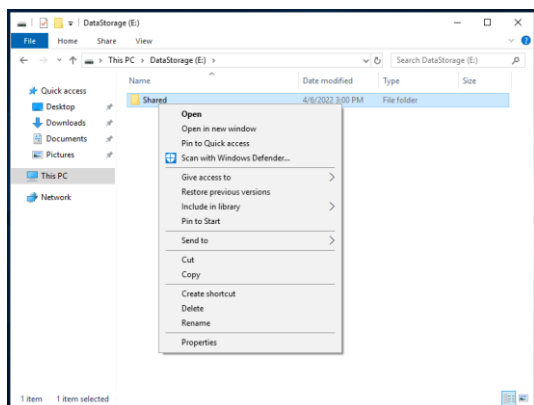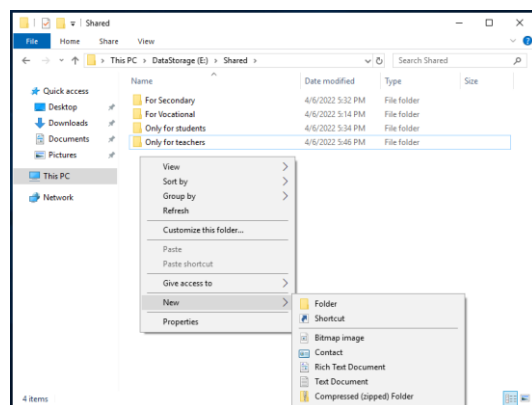| **Teacher user member of Administrator group permissions** |
|---|
| Shared folder permission as Administrator |

Permission denied to access

For Secondary folder except as Administrator

Permission denied to access

For Secondary folder except as Administrator

Permission denied to access Only for students

folder except as Administrator

Access restricted only read and execute

permission to Teachers folder